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S. Hrg. 104–518

CLEAN WATER ACT: MUNICIPAL ISSUES

HEARING

BEFORE THE

COMMITTEE ON
ENVIRONMENT AND PUBLIC WORKS
UNITED STATES SENATE

ONE HUNDRED FOURTH CONGRESS

FIRST SESSION

DECEMBER 13, 1995

Printed for the use of the Committee on Environment and Public Works

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CLEAN WATER ACT: MUNICIPAL ISSUES

WEDNESDAY, DECEMBER 13, 1995

U.S. SENATE,
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,
Washington, DC.

The committee met, pursuant to notice, at 9:33 a.m. in room 406, Senate Dirksen Building, Hon. John H. Chafee (chairman of the committee) presiding.

Present: Senators Chafee, Bond, Warner, Thomas, Faircloth, Lautenberg, Baucus, and Graham.

OPENING STATEMENT OF HON. JOHN H. CHAFEE, U.S. SENATOR FROM THE STATE OF RHODE ISLAND

Senator CHAFEE. What we're starting today is the reauthorization of the Clean Water Act.

At the beginning of the year in this committee, we set out on a course that included action on four items that seemed relatively easy or noncontroversial, if you would, and that we'd move on them quickly. Then we'd follow up with the larger efforts which would be involved with Superfund, Endangered Species and this, the Clean Water Act.

The first four items took more time than we expected, as things always seem to do in the Senate, but we're in pretty good shape. The National Highway System Bill has been signed into law; the Safety Drinking Water Act passed 99 to 0 in the Senate; the Interstate Waste Bill also passed in the Senate; the Water Resources Development Bill is on the Senate calendar with action expected the first part of the next calendar year. So those are the four items that we wanted to do and we've done. Now we get into the heavy lifting.

We've also laid a good foundation on Superfund and the Endangered Species Act with several thorough hearings on each. Now, we turn to Clean Water.

As I've said many times, I think the Clean Water Act is one of our most successful, if not the most successful, environmental program we've had. The progress that has been made in restoring our Nation's waters to support fish and wildlife, and for recreation and commercial uses, is visible and remarked upon as an outstanding achievement by every careful student of environmental law.

Yesterday, we had hearings on the reauthorization of the efforts to continue the protection of the striped bass. The striped bass has come back from a low in 1984 when it really was in terrible danger to record harvests now. Part of that was due, as the witnesses said, to curbing the overfishing that had taken place but a good portion was also due to the fact that our waters are cleaner and the pollution has been removed to a considerable extent, so the striped bass, which is an anadromous fish, can continue to breed and the young stocks will survive.

As with all human endeavors, the improvements can be made to the Clean Water Act. There are parts of the law that haven't achieved their objectives; other parts that have proved difficult to implement; and the water quality programs that we're just beginning to understand in some instances. As everybody knows, section 404 of the Clean Water Act has been a point of great concern and contention. Senator Faircloth has been working on legislation to amend section 404 and I'm committed to working with him in an attempt to reach common ground on those issues.

Section 404 reforms will be included with other Clean Water Act amendments as part of a complete but modest reauthorization package. I'm urging a limited agenda for this reauthorization. It seems to me we've got to stay focused on the problems that need to be fixed for two reasons. First, it's very difficult to get any environmental bill all the way through the legislative process. The bigger the bill, the more difficult it gets. Trying to do too much puts everything in jeopardy, including reforms that are essential.

Second, we must recognize that EPA and the States have limited resources to implement the reforms we enact. We will undermine our own priorities if we add a long list of other duties and mandates that are unrealistic in light of the very tight budgets that governments at all levels are facing, including EPA.

The issues we are considering this morning, include reauthorization of the State Revolving Loan Fund, the Grant Program, reform of the stormwater permit requirements and changes to the law with respect to combined sewer overflow and are certainly items which would make my short list of matters that should be in a reauthorization bill.

I'm delighted that our lead witness will be Senator Pressler. Senator, we appreciate your taking the trouble to be with us this morning. I know you've got some legislation that deals with this matter and we look forward to hearing from you.

STATEMENT OF HON. LARRY PRESSLER, U.S. SENATOR FROM THE STATE OF SOUTH DAKOTA

Senator PRESSLER. Thank you very much, Mr. Chairman.

I shall be very brief because I know you have many witnesses.

I'm pleased to be invited here today to express my views on potential revisions to the Clean Water Act on which I know you, Mr. Chairman, have done so much work on and I commend you for your good work over the years.

Earlier this year, I introduced two bills to bring some degree of fairness for municipalities. Several municipalities in South Dakota have had difficulties. In some cases mistakes were made, but those mistakes have been carefully and promptly corrected.

The first bill I've introduced, S. 1391, would lift the unfair burden of excessive regulatory penalties from the backs of local governments that are working in good faith to comply with the Clean Water Act. S. 1390 would allow companies that violate the Clean

Water Act the option to invest fines in improving their local environment. Both of these bills make good sense.

Under current law, civil penalties of up to $25,000 per day begin to accumulate the moment a local government violates the Clean Water Act. Once that happens, the law requires the local government present a municipal compliance plan for approval by the Administrator of the Environmental Protection Agency or the Secretary of the Army in cases of section 404 violations. Even after a compliance plan has been approved, penalties can continue to accumulate. In effect, existing law gives the EPA the authority to continue punishing local governments at the same time they are trying to comply with the law. There is something not right with this.

Virtually no city in South Dakota can afford such steep penalties. When I talk with South Dakotans few topics raise their blood pressure faster than the frustrating dealings with the Federal bureaucracy. Government is supposed to work for us, not against us. Mr. Chairman, this is clearly a case where Federal law works against those cities and towns trying to comply in good faith with the Clean Water Act.

S. 1391 would offer relief to small and large cities alike. Under my bill, local governments would stop accumulating civil and administrative penalties once a municipal compliance plan has been negotiated and the locality is acting in good faith to carry out the plan. Further, my bill would be an incentive for governments to move quickly toward achieving compliance with the Clean Water Act.

S. 1391 is designed simply to address an issue of fairness. Local governments must operate within a limited pool of resources. Localities should not be forced to devote their tax revenues both to penalties and programs designed to comply with the law. It defies common sense for the EPA to penalize a local government at the same time it is working in good faith to comply with the law. My legislation restores common sense and fairness to local government. By eliminating unfair penalties, local governments could better concentrate their resources to meet the intent of the law in protecting our water resources from pollution.

The second bill I've introduced would empower community investment in the environment. Under S. 1390, the Clean Water Act fines could be invested in the community where the violation occurred rather than sent to Washington. In May 1995, the Environmental Protection Agency began a new program to encourage local environmental projects through EPA fines. S. 1390 would adopt as law the goals of this program. To give clean water violators the option to perform community services by targeting their fines to local pollution prevention and remediation activities.

Under my legislation, companies found guilty of violating the Clean Water Act would be given the option of contributing to a community environmental project in lieu of paying fines directly to the Treasury. Violators could negotiate with State and local officials to determine an appropriate project. The money would then be paid by the violator directly to cover project costs.

The benefits to this legislation are clear. Passage of this bill would express Congress' support for local environmental projects. In addition, this legislation represents community empowerment. It gives the local community the opportunity to right a wrong done to its citizens by one of its own. It is common sense.

Clean Water Act violations inadvertently can punish the community where the violation occurred. It's only fair that when a violator is punished, the community should receive some compensation in the form of community service. This option certainly is preferable to sending penalty dollars back to Washington.

Mr. Chairman, I want to thank you again for allowing me to testify on ways to improve the Clean Water Act. My testimony this morning springs in part from the experiences of Watertown, SD—a small city, that is attempting to rebuild its water treatment center to comply with the Act. I look forward to working with you, Senator Lautenberg, and others and members of this committee.

Senator CHAFEE. Thank you very much, Senator Pressler. I think what you've suggested makes a lot of sense. Let me just ask a couple of questions, if I might.

First, the EPA has a policy somewhat similar to yours and I was wondering if you would get somebody from your staff to work with Mr. Perciasepe, or we will tell you who the person at EPA should be, to see if we can iron out the differences between what your legislation proposes and what EPA is doing.

Senator PRESSLER. Good.

Senator CHAFEE. The second part is the problem that is presented by the fact that many of these penalties, I guess most of them, are imposed by the States, so somehow it seems to me we've got to work out a signoff by the State that is imposing the penalty, so we've got to work on that particularly where we have a situation where as I learned yesterday in Atlanta, they are paying $9,000 per day in penalties for violation of its treatment works, but those apparently are State penalties. Somehow we've got to work it out that we here aren't overturning a State penalty that is imposed. South Dakota wouldn't do anything like that though?

Senator PRESSLER. Well, we might. In the case of Watertown, they're faced with Federal and not State penalties.

That is a very good point. We need a penalty system. My bill, S. 1390, would allow local environmental projects to benefit when penalties are invoked. So I put those two bills forward as constructive ideas for your consideration.

Senator CHAFEE. I think they are very helpful. I must say I've always thought it odd to come down hard on some city which is struggling with all kinds of problems and maybe they haven't done what they should have done with the municipal waste treatment facilities, but look at Atlanta, $9,000 per day, I think it would be far better if that were going to some other environmental activity in the State.

If you could tell us who you would like to work with the EPA, we will see if we can work together on these things.

Senator PRESSLER. Thank you very much.

Senator CHAFEE. Senator Lautenberg.

Senator LAUTENBERG. Would you mind, Senator Pressler, just one thing?

Senator PRESSLER. Yes.

Senator LAUTENBERG. I listened carefully to what you said and am interested in what you are proposing here.

I want to ask you this question. The Clean Water Act has been in place now some 25 years. Have there been any fines directed toward South Dakota communities in that period of time or is this something that is kind of a prospective concern?

Senator PRESSLER. Yes. The city of Watertown, SD, is potentially amassing fines of $25,000 per day. It's a mid-sized town of about 20,000 people and growing. Mayor Brenda Banger is struggling with these problems to bring the city into compliance. They did make some mistakes; they are a small town and don't have teams of experts advising them. They have been scrambling to correct the pollution problems. The local citizens feel that they have done everything they can.

Senator LAUTENBERG. The fine was formally assessed?

Senator PRESSLER. No. The final penalty amount won't be addressed by EPA until the city is in full compliance.

Senator LAUTENBERG. Thank you, very much.

Senator CHAFEE. I think any fine like that to a town that size would get everybody's attention.

Senator PRESSLER. Yes, it has, and they're writing to their Senator about it.

[Laughter.]

Senator CHAFEE. I have complete confidence that he can take care of the situation for them.

Senator Bond, did you have a question for Senator Pressler?

Senator BOND. After he leaves, I have a very brief opening statement I would like to give but I would say that both Senators from South Dakota have been pressing the Appropriations Committee to come up with the money to bail out Watertown. We have had great pressure and they make a very convincing argument.

Mr. Chairman, I certainly agree with you, when we are assessing fines, humongous fines against small communities with limited resources, it is probably the dumbest thing we can do if we really want to improve the environment. When you put additional burdens on small communities, you are not helping them solve the problem and I think we all want to solve the problem. Watertown has had very, very effective and very aggressive spokesmen on their behalf.

Senator PRESSLER. On the other hand, the small towns do need to comply. This town has a part-time city attorney who just doesn't have the professional staff that larger cities do. They have to comply and they understand that. This is a unique case and I bring it as an example of one little town where somebody made a mistake but they quickly tried to comply. That is the reason I introduced these two bills.

Senator CHAFEE. I would point out Senator Bond was not here a little earlier, but many of these fines, in all fairness to EPA, are imposed by States.

Anything else of the Senator?

Senator LAUTENBERG. I just wonder whether Watertown is a generic name that we give to communities under burden here?

Senator PRESSLER. Yes, indeed. I think every State has one.

Senator CHAFEE. That would be an interesting exam, how many States have towns named Watertown. I know New York does.

Senator LAUTENBERG. Rhode Island?

Senator CHAFEE. None in Rhode Island.

Thank you very much, Senator.

Senator Warner, did you have a question of Senator Pressler?

Senator WARNER. No.

Senator CHAFEE. Thanks very much, Senator, for coming.

Opening statements—why don't we do them in the order of arrival?

Senator Lautenberg.

OPENING STATEMENT OF HON. FRANK R. LAUTENBERG, U.S. SENATOR FROM THE STATE OF NEW JERSEY

Senator LAUTENBERG. Thanks very much, Mr. Chairman.

I welcome the opportunity to hear the testimony and to review the submissions on the possible refinements to the Clean Water Act.

As we all know, the Clean Water Act is something on which you've worked very hard over the years that I've been here and with a significant degree of success, I might add, and it has been very successful in improving our streams, our lakes, our ocean shores and our other water resources. These improvements are evident to those who take advantage of our fishery resources or spend time on our beaches. Water pollution has been reduced and reduced substantially.

The economic costs of these environmental improvements have not been small, but the economic benefits to our coastal communities and recreational industries dwarf the costs not to mention the health benefits to all Americans who drink the water, swim in our lakes and our oceans, and eat the bounty from our water resources. I think it is critical that these benefits be kept clearly in mind as we explore the possibility of slowing down further improvements and lowering related standards. Yet, I'm concerned that some of the proposals under consideration here in Washington would have the effect of gutting the Act and undermining its effectiveness.

Mr. Chairman, I know you called this hearing to focus on the Clean Water Act as it affects municipalities, and this is an area in which some improvements in the Act are obviously necessary. However, I'm very skeptical of those who are recommending changes that will weaken the standards that have led to the improvements that we now enjoy. I've introduced legislation, S. 1426, to help local governments that are looking to privatize the ownership or operation of their sewage systems. The bill is designed to address a quirk in current law that now requires privately owned companies to meet a different standard for water treatment than the standard applicable for publicly owned entities.

I believe it is generally agreed by EPA and others that the level of treatment should not depend on who owns the sewer system. This difference was not intended by Congress and it doesn't make sense as a matter of public policy. The statutory fix that I'm proposing would allow communities to fairly compare bids on their merits and not on some unintended ambiguities in the law.

Mr. Chairman, again, I thank you for your leadership on Clean Water legislation and I look forward to working with you as we try to improve the Act.

Senator CHAFEE. Thank you very much, Senator, and I'm interested in your proposal. The second panel will discuss the privatization of the waste treatment plants.

Senator Bond.

OPENING STATEMENT OF HON. CHRISTOPHER S. BOND, U.S. SENATOR FROM THE STATE OF MISSOURI

Senator BOND. Thank you very much, Mr. Chairman. Particularly, I appreciate your willingness to move on the reauthorization of the Clean Water Bill. This is obviously of great importance to the environment and to the Nation. It is a particularly important issue in my State of Missouri and I hope to be able to work with you and other members of the committee on these measures.

Make no mistake about it, I think the current Clean Water Act has provided the framework for Federal, State and local governments to make significant and gratifying progress toward cleaner water in this country. The Cuyahoga River is now fishable; salmon spawn in Maine's once-polluted Androscoggin River; the presence of toxins in lakes and rivers has been on a downward trend since the 1960's. In Missouri, there has been diminishing concentrations of DDT in our water; eagles and ospreys are making a dramatic comeback. It's been shown that the water quality in the Mississippi River exceeds that of rivers in other industrialized nations. I've fished and waterskied in the Mississippi River and I always kept my mouth closed when I went in. While there are still problems that need to be solved, we should acknowledge that our water quality has been getting better, not worse over the past two decades.

In addition, we need to ensure that this progress continues. I think many would agree that the current Clean Water Act is one of the better-working environmental laws. However, there are still some very significant issues that need to be addressed and changes in the current law that need to be made. I think everyone who looks at it would agree that the stormwater provision is broken and needs to be fixed.

We have cities spending upwards of $650,000 to obtain a permit. That expenditure generates paperwork, not cleaner water. The sanitary sewer overflow provisions need fixing. Under current requirements, in my State, the metropolitan area of St. Louis estimates they would have to spend $2 billion to comply.

I also want to stress the importance of proceeding with an understanding, as you have indicated, Mr. Chairman, of what local entities, the States and the Federal Government can afford. I think we need, in this and in other areas, to be very much aware of the available budgetary resources, a parochial plug, I admit, but we are looking at the realities on the budget side as well.

I look forward to working with you to address these issues and others as we proceed to act on Clean Water legislation.

Senator CHAFEE. Thank you very much, Senator.

There are two points I'd like to make. I suspect, and somebody can correct me on this, the Clean Water Act, you mentioned expenditures that have been made on it, and I suspect it's the second largest Federal public works program or construction program in the history of the country, the highways being the first. Maybe the locks and canals exceed it but it's pretty close. If not second, it's the third largest public works expenditure in the history of the Nation.

Second, the kind and good words you said about what's been accomplished in this Nation in our great rivers is so true and particularly when you compare it to Europe. We've seen the Rhine, many of us, and it just isn't the Mississippi by a long shot for cleanliness, not that we can burst with pride and scorn anything taking place elsewhere but I think we should be pleased that the money has produced results. We should be very happy about that.

Senator Warner, did you have a statement you wish to make?

Senator WARNER. I'm going to be involved with the second panel, Mr. Chairman, but I have a statement for the record.

[The statement of Senator Warner follows:]

STATEMENT OF HON. JOHN WARNER, U.S. SENATOR FROM THE COMMONWEALTH OF VIRGINIA

Mr. Chairman, please accept my gratitude for your scheduling this hearing on issues relating to the reauthorization of the Clean Water Act. The focus on local government concerns is important to this reauthorization and of keen interest to me.

Local governments are working to implement additional requirements under the Clean Water Act particularly relating to the control of combined sewer overflows, compliance with water quality based effluent limitations, and stormwater controls. These requirements follow costly municipal construction programs over the past 20 years to build secondary sewerage treatment. Of course clean water is not the only priority of local governments, nor the only Federal mandate.

For the Nation as a whole continued steps to improve and maintain water quality is an important priority for environmental protection, for our communities, and for the economy. Now, over 90 percent of the cost of clean water is paid for by local governments through bond financing or loan repayments. Even in this period of budget reductions, it is important for the Federal Government to continue a funding contribution for achieving clean water.

Since the 1987 amendments, Federal funding to meet the enforceable requirements of the Clean Water Act has been provided in two forms: (1) loans from State revolving funds or SRFs established under title VI of the Act; and (2) grants appropriated for individual communities with significant needs under title II and the Environmental Protection Agency's general grant authority. The need is clearly there for a flexible approach of both loans and grants to meet these mandated requirements.

Overall, communities are struggling to build wastewater facilities. Future needs were estimated by EQP in 1992 to be $147.5 billion. This estimate included completion of secondary treatment, compliance with water quality based permit limits, and limited needs estimates for construction of CSO controls and compliance with Federal stormwater permits.

Construction of CSO control facilities was estimated in 1992 to cost approximately $42 billion based on limited information on permitted needs and modeled needs using the assumptions of EPAs CSO Control Policy. Since that report, CSO communities have initiated long-term planning and design efforts which should develop more detailed cost estimates.

CSO cities in my State have undertaken facility planning and have initiated construction and other implementation steps. My cities have found that compliance will be a costly burden to their customer ratepayers as well as an environmental imperative.

For the Nation as a whole, it is vitally important Mr. Chairman, that the Environmental Protection Agency conduct a full and detailed Needs Survey in 1996 as provided under the Clean Water Act. This will be the first such survey in over 4 years since, as I understand, the Agency conducted a drinking water needs survey in 1994 in lieu of the wastewater survey.

I look forward to working with you, Mr. Chairman, on a funding solution for municipal compliance that will serve our national clean water program and the needs of local communities in complying with that program.

Senator CHAFEE. Senator Thomas, do you have an opening statement?

Senator THOMAS. No, sir, I don't.

I just want to say I'm glad we're moving on this. There are a number of issues particularly that personally affect the west and small towns that we need to deal with and I hope the States and Governors are very involved in this process.

Senator CHAFEE. Fine. Now, Mr. Perciasepe.

STATEMENT OF HON. ROBERT PERCIASEPE, ASSISTANT ADMINISTRATOR, OFFICE OF WATER, ENVIRONMENTAL PROTECTION AGENCY

Mr. PERCIASEPE. Mr. Chairman, if I might use some charts.

Senator CHAFEE. You certainly may. Charts are big these days.

Mr. PERCIASEPE. I don't like reading testimony; I like to use charts and so I would ask your indulgence and not meaning any disrespect in turning my back so I can look at the charts occasionally.

Senator CHAFEE. It's OK to turn your back but don't block the chart.

Mr. PERCIASEPE. The Clean Water Act, I think we would agree, has been one of the most successful environmental laws. I've heard that repeated several times in the opening comments, and I want to reiterate that. We recognize the need for change in how the Act is implemented in certain areas.

I want to emphasize that the Administration is committed to that change. We're committed to demonstrating the ability to make that change within the legal framework of the existing law as well as working with Congress on any modifications to that framework. Whatever we do, we have to maintain the existing flexibility and probably equally, and maybe more importantly, maintain the accountability that is in the existing law. You can't have flexibility without accountability. So when we get into this and we start looking at how we work on these different things, we have to make sure that we keep that in mind.

I think you will see we've made tremendous progress over the last 25 years. As mentioned before, this is a picture of a sewage treatment plant under construction, probably the hallmark example of what has been going on under the Clean Water Act. If you look at the next chart, you'll find the investment we've made since the Clean Water Act was enacted shows as the population served has gone up, the amount of pollution has gone down. The population has almost doubled, and the amount of pollution has been reduced by almost a third from sewage treatment plants in the United States. This is an astounding and significant achievement of the U.S. communities, government, local citizens and the Congress. This has been based on that strong partnership.

I have to say that while we've been making this progress, and we need to celebrate that progress and not ignore it, we have to also recognize we still have significant problems. A third to forty percent of the waters in the United States that are assessed still do not meet the basic uses that we want to see them achieve. The leading causes that we continually identify in surveys we do with States include municipal sources. While over a total picture, the amount of pollution from urban sources has been going down, the concentration, where the population is, also significantly affects the potential and continuing improved benefits we get from clean water in the United States.

Senator CHAFEE. That is a very important chart you just showed. It's important to note that industry doesn't show up in any of the lakes, rivers or estuaries as a major contributor. In other words, not that it is not a contributor, but the investment that we've required of industry has paid off now.

Mr. PERCIASEPE. We're looking at the gross, general, basic uses of water; we're not looking at biocumulative toxics or the industrial contribution into the sewage treatment systems, but in general, the basic uses of the water. These are the major uses. Obviously we have a significant problem in the country with toxic accumulations that is another issue not necessarily related, although of some relationship to the municipal issues we're talking about today.

Let me give you a graphic of the kinds of things that we're dealing with still in the country. This is what is commonly called a combined sewer overflow. That is raw sewage pouring out into a stream. There is a hydrologic reality in the world that a lot of rain, you can only build systems so big and what we're struggling with is to come up with the appropriate policies to find the balance between what are the sequences, what are the periods that you allow this to happen.

Senator LAUTENBERG. Do you know where that is?

Mr. PERCIASEPE. I don't remember, but I can find out. I can find out before the end of the hearing.

Senator LAUTENBERG. That could be a picture in a laboratory room.

Mr. PERCIASEPE. It's not in a laboratory and you can see the trees growing and the electric conduits coming out of the tunnel. There are over 1,000 communities that have this problem; they are not all as interesting as that one. There are some within walking distance of this particular room.

Senator CHAFEE. It looks suspiciously like Providence, RI.

[Laughter.]

Mr. PERCIASEPE. You'll note the traditional turn-of-the-century stone and masonry construction that is pretty much everywhere.

Why do we need to continue pushing here? I show this as a nice respite, but beach closures due to contamination continue to plague the United States. We have an increasing amount, a combination of the fact that we have wet weather problems, and the fact that we're looking more strongly in many of the States. We had about five beach closures in the United States in 1988; we had over 2,400 in 1994. This is a combination of increasing problems in terms of wet weather and we're looking more to determine what the problems are. I don't need to mention, or do I, the economic impact this can have on the benefits side.

We also have—this is an interesting State here—a third of the shellfish beds in the United States are affected by contamination from municipal and other sources. The economic impact on this can be very significant locally. We close shellfish beds, almost a third of them in the United States, in one way or another for certain times. It has a significant economic impact.

Senator CHAFEE. You're not ganging up on me, are you?

Mr. PERCIASEPE. This is Cleveland—someone mentioned the Cuyahoga River. The benefits that we are beginning to accrue nationally from the work that's been done is also astounding. Whether you look at the Cleveland Harbor, and here is some economic activity. I suspect those people aren't just hanging out there; they are spending money, they are recreating and enjoying themselves next to a river that used to be very polluted.

You can go to the Baltimore Inner Harbor, you can go to the Georgetown waterfront, you can go to any number of places in the United States. The improvement isn't just because of the Clean Water Act, but certainly it would not be at the level it is or the enjoyment level it is if it wasn't for some of the work that has been done under the Clean Water Act. So there are tremendous opportunities for increased benefits in urban areas from clean water. Most cities are looking to their waterfront areas as part of their urban renewal programs and this is an integral part of it. That is sort of the introduction or why we are interested in municipal issues and what some of the problems are.

What do we have in the existing Clean Water Act? There are significant safeguards in the existing Clean Water Act to deal with these issues and it has been dealing with them, as we see some of the benefits, and will continue to deal with them. We have a State Revolving Fund, a loan fund, which is a very well run and useful fund that provides funding for these infrastructure improvements. There is a framework for controlling urban wet weather pollution in the stormwater management provisions; the CSO combines overflow policies in looking sanitary sewer overflows.

There is a pretreatment program that allows municipalities to regulate the industrial discharges to their sewer systems which in term further reduces pollution going to the plant, going through the plant, and improves the quality of the sludge, the biosolids that are generated from the sewage treatment plant. Cleaner sludge provides mayors with more opportunities and options for cost effectively dealing with the sludges and biosolids that are developed from the sewage treatment process.

I think we have to recognize we have to continue these programs in a common sense, cost-effective way. We have to recognize that in the implementation there are financial constraints, that there are time constraints in getting things done, and it's important for us to work with municipal and State officials as we do those implementations.

Let me talk about these areas very briefly. What we intended the SRF to do in 1987 when Congress created it is happening. One dollar in, equals four dollars out in terms of improvements. That comes from the leveraging that States are doing by adding bonds to it; the State and local match; and when you put all that together, it's an astounding program that is generating a lot of financing for sewage construction in the United States.

I want to say our goal, that we would encourage you to adopt, is that we want to see this fund capitalized on a national level. That means capitalization of the funds at a level that when we walk away from it, it's revolving for the next—some would say in perpetuity—but for the next 30 years or so at a $2 billion-a-year level adjusted for inflation. So that in 2015, the repayments are generating the same kind of investment then that we want them to be generating now. That is going to require about another $10 billion of investment into those capitalization funds over some course of the years.

I would like to say today the Administration sees that this is completely compatible with the 7-year balanced budget negotiation that is underway.

The first point is the annual capitalization should support that $2 billion in loans out into the future. We are also working to provide greater focus on watershed protection inside the intended use plans, classify how we use this money, provide the proper context for setting priorities; and we need special help for small and disadvantaged communities.

This is an interesting slide. All of us have been stuck in the rain and running across the street and getting our feet in a puddle. As we look down, we often see something floating in it or there are things we don't see floating in it, but whatever it is, it is all going into the storm drain. This is a picture of some debris going into a storm drain. This is part of urban life. We have a program that is beginning to deal with this issue. That is one of the biggest challenges perhaps facing the legislation and implementing the Clean Water Act.

What we need is sort of a common sense management of urban wet weather pollution, looking at it holistically, not a stormwater program, a combined sewer overflow program, or some other program that deals with it when it rains and we have hydrologic modifications of the municipal infrastructure. We have created a Wet Weather Advisory Group which has representation of all the stakeholders on it. We are looking at the second phase of the program for municipalities under 100,000. We have enacted regulations and have settled some court cases that allow no permit to be issued until at least 2001 unless the State determines there is a water quality problem. We hope to be able to work with that advisory group which is represented by folks like the National League of Cities and State pollution control agencies and environmental groups and some of the industry folks so that as we learn how to do the Phase II Program in a very cost-effective way, what we learn there we can reapply also to the Phase I Program and look at modifications there and make sure what we do is compatible with what we've already done in the combined sewer overflow policy. As we look at sanitary sewer overflows, we don't create any policies and we're not talking about regulations, that we don't create any policy that is incompatible with looking at this whole thing holistically.

I have to say that there is a lot of misinformation about the Stormwater Program. What I have here is the very expensive, very thick, very difficult stormwater management permit for the city of Baltimore, population of 750,000. I'd be more than happy to submit that for the record. That was produced by the State of Maryland. There have been television shows about this program and in Arizona about permits requiring monitoring in dry streambeds. These are just not true. There is no permit requiring monitoring in dry streambeds. In fact, the permit for Arizona and the municipalities in Arizona, set up by our regional office in San Francisco, requires them to come up with their own monitoring program when it rains. That would be a concept that even us in Washington understand, that you've got to monitor wet weather when it rains.

Before I leave stormwater, let me just say you're going to hear a lot about it; it is something we need to focus on; it's something we are working very hard on at the EPA to make sure we have a reasonable and implementable program working with the stakeholders; and we want to work with you as you get into this. I don't want to leave you with the impression that we're not doing anything to try to make sure that program works appropriately. We are working very hard on that.

There are other municipal programs I'm going to just mention briefly and then stop. The Pretreatment Program, we are looking at streamlining some of the core requirements there but I have to tell you the Pretreatment Program is another major success of the Clean Water Act which has allowed mayors to have a lot more flexibility in how they deal with their biosolids in a cost-effective way. We're looking at the sludge regulations themselves so that we can set regulations so that people know what the right quality is. Now we're starting to work on how to get the States to be more in the driver's seat on how to regulate that. We're looking at over all burden reduction in terms of reduced reporting, streamlining permit application and electronic reporting. These are other things that are going on that will be affecting the municipal sector.

We can continue to restore urban waters. You can see what the benefits are. They are tremendous. That's where the people are. There still are serious urban water pollution problems, make no mistake about it. They still exist; we just have to be innovative in how we attack them. The solid, statutory framework exists to do that, and EPA is committed, and the Administration is committed to responsible implementation of that foundation.

I think that is the last chart and I will be happy to take your questions, Mr. Chairman.

Senator CHAFEE. Senator Baucus, did you have a statement?

OPENING STATEMENT OF HON. MAX BAUCUS, U.S. SENATOR FROM THE STATE OF MONTANA

Senator BAUCUS. I'll submit it for the record, Mr. Chairman.

Briefly, to build upon the statements of Mr. Perciasepe, with whom this committee has worked for years, I must say I think most of us admire him for his dedication, perception, and reasonableness.

I think the Act is a good Act. It has very much helped to improve the quality of our waters. It certainly has reduced the amount of untreated sewage, sludge that is dumped into our rivers and lakes.

A few areas need work to make it more efficient and more flexible in certain cases, but we shouldn't forget the good news. The Clean Water Act is a major success story in the United States.

We all saw the efforts in the House to weaken it and cut it—very shortsighted, misdirected, wrongheaded. The American people responded to some of those efforts in the House and also feel that most of those efforts in the House are not accurate.

I must say too that there are a lot of unmet needs. We do have budget considerations here. I favor balancing the budget over the next 7 years—I think most Americans do—but consistent with the requirements of the budget, some of the estimates of unmet needs that could be addressed by the Revolving Loan Fund are astounding. Some estimates I've seen are that we still have approximately $137 billion worth of unmet wastewater needs—in my State of Montana, it's $65 million. Those are big numbers when we have to meet our obligations consistent with the budget. I think that no Clean Water Act reauthorization this Congress is much better than one that would gut the Act.

Just hope we keep our eye on the ball here that strong, environmental protection in the sense of clean water but at the same time, work to improve upon it but not get it because that I think would be a big disservice to the American people.

[The prepared statement of Senator Baucus follows:]

STATEMENT OF HON. MAX BAUCUS, A U.S. SENATOR FROM THE STATE OF MONTANA

Thank you, Mr. Chairman, for holding this hearing.

The Clean Water Act may be our most effective environmental law. In the 23 years since its enactment, we have seen remarkable progress. Our rivers no longer burn. Far less sewage is dumped, untreated, into our waters.

In light of this, I believe that we should proceed very cautiously.

We all saw what happened, earlier this year, in the House. They set out to "reform" the Clean Water Act. But they ended up gutting it. They passed a bill that weakens many of the most important provisions of the Act, and creates dozens of new loopholes.

The American people reacted angrily. Clearly, they don't want us to rollback 25 years of environmental progress.

I agree. To my mind, it would be better—far better—to pass no bill at all than to pass one that guts the Clean Water Act.

So I strongly urge that we keep a tight focus, on a handful of key issues upon which we may be able to achieve a bipartisan consensus.

I am confident that the Chairman shares this view. Over the years, he has been one of the Senate's greatest champions of a strong Clean Water Act. I hope that all other members of the committee share his view.

Turning to the issues at hand, I believe that one issue about which we may be able to achieve a consensus is the State Revolving Fund. It's one of the big success stories of the Clean Water Act.

It was established as part of the 1987 Amendments to the Act, with the strong support of the Committee Chairman. Since its inception, the EPA has awarded more than $8.5 billion in capitalization grants and States report that SRF-funded projects proceed more quickly and at a lower cost than projects funded with direct grants.

Despite the progress made, the EPA estimates that there is still approximately $137 billion worth of unmet wastewater needs, which will go unmet if we do not continue to fund the SRF. In my State of Montana, it is estimated that $65 million is still needed to improve the water pollution control infrastructure statewide.

I believe that the Federal Government still has an obligation to help State and local governments meet these needs. At the same time, I believe that we can modify the operations of the SRF, so that it is more flexible and more responsible to particular local circumstances.

I look forward to discussing these issues, and thank the witnesses for taking the time to testify before us today.

Senator CHAFEE. Thank you, Senator Baucus.

Senator Graham, do you have a statement you'd like to make?

Senator GRAHAM. Mr. Chairman, I do not have a statement. I would like to ask Mr. Perciasepe a couple of questions at the appropriate time.

Senator CHAFEE. We will go right down the list in order of appearance.

Mr. Perciasepe, some communities can't afford to repay the SRF loans. What do you think about allowing some grants under that as we did in the Safe Drinking Water bill? Obviously, when you start making grants out of that fund, you're not going to have the turnover and the replenishment of it that you are looking forward to.

Mr. PERCIASEPE. One of my points was that we have to find ways to deal with smaller communities. Some States have been able to appropriate some State funds that they can blend in. I know I had that luxury when I was with the State of Maryland, that we had a State appropriation of about $5 million a year that I could mix and match with the revolving fund to get the annual cost of the money down to a level that was affordable to just about every community that we had to work with. All States don't have that luxury and perhaps sometimes more might be needed. So I am in favor of working with you to look at ways we can do that. There are a number of ways to do it. You can provide more flexibility in terms of what the interest rate is, perhaps going to a negative interest rate, but that probably gets somewhat complicated, finding some small amount of loan forgiveness at some amount is also another approach where States would have the flexibility to make those determinations.

We have to factor in—this is something we struggled with in the Safe Drinking Water Act as well—what the long-term impact on the integrity of the Fund would be because I think that is one of the gifts we can give to States, a fund that will work for them into the future. We have to make sure that we take that into account when we do this. Either we will have to put in more than what we've suggested, or we would have to shoot the sights lower as to what the annual revolving rate would be in the future, making those kinds of policy choices. I do believe it is an issue that is well worth visitation, some approach to deal with the small communities.

Senator CHAFEE. This is a bit of a complicated question, so I'd ask you to listen carefully. On the next panel, Mayor Wennberg of Rutland, VT, who represents the National League of Cities, will tell us in his testimony that most cities don't have the legal authority to control the activities that contribute to water pollution through city storm sewers. There is very little reliable information on how to implement effective stormwater programs for urban areas. We don't know what works and what doesn't, the Mayors are going to say. Is that a fair assessment, in your view? You're not going to be here when the Mayor testifies. I'm not trying to pit you against him.

Mr. PERCIASEPE. Actually, the Mayor is a friend of mine. I actually spend tourist dollars near his town and he appreciates my skiing up there.

I think we know enough certainly to do something. If the excuse that we don't know enough is put forward to do nothing, I think that is a mistake and I don't know if anybody would necessarily agree with that. The question is, what is it that we ask people to do in these permits and the flexible frameworks that we're trying to further develop in the process in terms of looking at it on a priority basis, looking at it on a watershed basis, tying it together with other wet weather-related control needs in urban areas.

I think the program is definitely flexible enough to grow as we learn. In fact, many of the permits that have been issued, and almost a little over half of the permits under Phase I have been issued, have in them components that deal with that uncertainty. At the same time, they don't throw up their hands and say we can't do anything. What we have to do is focus on the long-term goal and not necessarily give up on the short term. I do know there are things we know can be done now that will have a beneficial effect.

Senator CHAFEE. Somehow, I think you folks have got to have a pool of information available to help these mayors, particularly in the smaller cities.

The final question. There are three things that are generally raised in connection with the Clean Water Act. They are as follows: do something to fix the combined sewer overflows and the stormwater permits; the second thing is one that combines CSOs and the stormwater; and the third is the section 404, doing something on the wetlands provisions.

Are there any other items in the Clean Water Act that you think need a legislative fix?

Mr. PERCIASEPE. Let me caveat my statement by saying that we think anything we do here, and I may be reiterating what Senator Baucus was saying, is going to have to pass a pretty high muster from the Administration's point of view in terms of its improving water quality, not treading water or even having the potential of going backwards. That being said as being sort of the hurdle that we would look at in these provisions, I think your list is not inappropriate. I might add to it incentives for watershed management, I might add into that some work on nonpoint sources, but I think a short list of things we can really sink our teeth into and do the kind of work that's necessary to make an improvement but not fall into a path that doesn't improve at the same time as protect and provide that accountability I mentioned earlier, I think would be good for us.

Senator CHAFEE. Senator Lautenberg.

Senator LAUTENBERG. Thanks very much, Mr. Chairman.

Mr. Perciasepe, one of the problems we have in the New York Harbor area, in our region, as you know, because much of our coast shares common waters with New York City and New York State, we've had enormous problems as a result of trying to maintain the quality of our water and clean it up, our coastal waters. You mentioned that in your statement.

One of the principal sources of pollution is the combined sewer overflow from New York City. In 1991, under significant pressure from environmental organizations and the Interstate Sanitation Commission, New York City signed a consent decree with the State of New York that required the city to survey its catch basin and install hoods in all city street catch basins by September 1993. Because most debris washes of city streets, these simple hoods were estimated to be able to decrease the discharge of floatables by 70 percent.

Two years after this deadline, it's now 1995, and New York City has failed to implement this simple remedy. Instead, what they have done is gotten permission from New York State to eliminate their obligation to install hoods in roughly two-thirds of the catch basins. The city claims that it underestimated the number of hoods it needed to install. However, their own files indicate that even in

1991, the city never set aside any additional funds to install these hoods. What is unfortunately apparent is that New York City never made a serious effort to comply with its important permit requirement. In fact, they haven't even surveyed the catch basins to determine which needed hoods as required by the 1991 permit and consent order.

In a letter dated October 17, 1995, I objected to the situation and raised the possibility or at least raised the concern about the possibility that the EPA would condone New York State's action. I got an interim response on November 19 and was promised a fuller, substantive response within 2 weeks. Assuming the 2-week deadline was missed because of furloughs or reduced funding on the CR, can you tell me why EPA has not yet responded on this very important issue to my State and surrounding areas?

Mr. PERCIASEPE. I would be at a loss to tell you why they haven't responded specifically. I know it's the regional office that is doing the work on that. All I can tell you is I will talk to the regional administrator about that. I don't know the specifics of those requirements except the fact that we are reviewing what the New York City and New York State——

Senator LAUTENBERG. The regional administrator?

Mr. PERCIASEPE. The regional administrator, Jean Fox. Is that who responded to you?

Senator LAUTENBERG. Yes.

Mr. PERCIASEPE. That's the people who are reviewing the permit and I am actually going to see her in several hours today personally and I will tell her your concern and we will make sure you get the response you need. If not a response, definitely you may want intervention of a nature that satisfies the State of New Jersey in terms of coming up with a plan to deal with this. So rather than just a response, I would like to make sure that we interact on it.

Senator LAUTENBERG. If you could supply that, not only for me, but for the record because I want it clearly established that there is a glitch in the system that enables something like this to happen even though the evidence is overwhelming that it has a serious, negative impact, so I'd appreciate that.

What would be the impact of the House bill 961 on the New York City consent decree? Have you looked at that and other actions that EPA has taken to decrease the problem of overflows from combined sewers?

Mr. PERCIASEPE. One of the biggest differences—time and coming up with money and doing a rational plan to attack these problems, I think is not an inappropriate thing for all of us to consider. What is fundamentally different with the House bill is the goal, the goal no longer adheres to meeting water quality standards which is the ultimate goal of the Clean Water Act. The more programs we take away from having that responsibility inside the framework of the Clean Water Act, the less integrity there is, the less accountability there is, and the less you'll be able to make progress toward the goals that we have been making. So I think that's probably one of the major differences between what we would consider important and what is in that current drafted legislation.

Senator LAUTENBERG. Mr. Chairman, I'm finished, but that's a critical point and that is, what is the objective? Is the objective to manage the works or is the objective to get to some point? If we can't do that, then I think we owe it to the public to tell them that we don't intend to get to that point, be content with the waters polluted as they are and warn your kids. That is the situation we find ourselves in.

[The letters referenced by Senator Lautenberg follow:]

FRANK R. LAUTENBERG
NEW JERSEY

COMMITTEES:
APPROPRIATIONS
BUDGET
ENVIRONMENT AND PUBLIC WORKS
SMALL BUSINESS
HELSINKI COMMISSION

United States Senate
WASHINGTON, DC 20510-3002

October 17, 1995

Ms. Jeanne M. Fox
New York Regional Administrator
U.S. Environmental Protection Agency
Jacob K. Javits Federal Building
26 Federal Plaza
New York, New York 10278

Dear Jeanne:

We have long been concerned about the potential impact of debris from New York City streets which ends up in the harbor area and ultimately makes its way to the beaches of New Jersey. We write to urge that you exercise EPA's authority under the Clean Water Act to reject New York City's effort to weaken its Clean Water Act sewage permit requirements that would increase this problem.

New York City's present permit and consent order require that it take measures that should remove close to 70% of all floatable debris. It must accomplish these reductions through a combination of booming and skimming controls of certain combined sewer overflows and replacement of hoods in its street catch basins. We believe that the City's proposed changes would violate the Clean Water Act, EPA's national Combined Sewer Overflow policy, and the common sense need to protect New Jersey's (and New York's) multi-billion dollar beach tourism industry through cost-effective technologies.

In fact, we believe EPA should insist that New York City strengthen its removal of floatables. New York City should take at least the measures New Jersey is taking, which are mandated by EPA CSO strategy, and which could result in the removal of more than 90% of New York City's floatables by 1998.

As you know, in 1987, 1988, and 1989, New Jersey experienced billions of dollars in economic harm in good part as a result of floatable debris - most of which originated from New York City streets. Since that time, medical waste tracking, beach cleaning programs and harbor skimming programs have somewhat reduced the threat of such incidents. However, a primary cause

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of reduced beach incidents in the last years has been favorable wind patterns that blow floatable debris out to the ocean instead of toward shore. So long as large volumes of floatable debris continue to be discharged into the ocean, the threat of millions or billions of dollars in damages to our critical tourism industry remain.

In 1991 - under pressure from environmental organizations and the Interstate Sanitation Commission - New York city signed a Consent Decree with New York State that required the City to survey its catch basins and to install hoods in all City street catch basins by September of 1993. Because most debris washes off City streets, these simple hoods are estimated to decrease the discharge of floatable debris by approximately 70%. Two years after this deadline, New York City has failed to implement this simple remedy. Instead, New York City has gotten permission from New York State to eliminate its obligation to install hoods in roughly two-thirds of its catch basins. Worse, they would only be obligated to install the lesser amount of hoods by December, 1997, more than four years after the Consent Decree deadline.

New York City claims today that it underestimated the number of hoods it needed to install. However, New York City's own papers indicate that even in 1991, the City never set aside any additional funds to install these hoods. What is unfortunately apparent is that New York City never made a serious effort to comply with its important permit requirement. In fact, New York City has not even surveyed its catch basins to determine which need hood, as required by the 1991 permit and consent order

If New York City is relieved of this obligation, its permit will allow it to discharge into the waterways almost 50% of its floatable debris for the next ten to fifteen years. That means roughly 7 million pieces of floatable debris will be discharged into the New York Harbor, which New Jersey shares, each year.

In contrast, New Jersey is requiring that all municipalities submit plans that would require simple screening devices on all outfalls - devices that are capable of removing more than 90% of all debris -- unless such a device is not technically or economically feasible for a particular outfall. Those plans will be implemented in most cases by 1997.

Even if New York City fulfills its existing consent decree, it still would not achieve the level of removal mandated in New Jersey. New York city has refused to install screening devices on the vast majority of its outfalls, and has rejected other simple floatable removal technologies. This position violates the national Combined Sewer Overflow strategy, which requires that each city "control" floatable debris by 1997 through all feasible, low-technology solutions.

As you know the New Jersey delegation to Congress has led the effort to protect the Clean

Water Act - in part because of New Jerseyans deep personal commitment to sound ocean water quality. The citizens of our state are entitled to the protection of that Act - particularly as pollution threatens our most vibrant tourist industries. Our citizens should not have to live with deals that threaten their livelihoods and ways of life. We urge you to take immediate, strong action to block changes to New York City's floatable consent order and to demand all reasonable further measures.

We look forward to discussing the issues with you further.

Sincerely,

Bill Bradley
U.S. Senator

Frank R. Lautenberg
U.S. Senator

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY - REGION II
290 BROADWAY
NEW YORK, NEW YORK 10007-1866

NOV 14 1995

Honorable Frank R. Lautenberg
United States Senate
Washington, D.C. 20510

Dear Senator Lautenberg:

This is an interim response to the letter of October 17, 1995 from you and Senator Bradley concerning the abatement of floatables pollution from New York / New Jersey Harbor combined sewer overflows (CSO's) and specifically, the City of New York's program to mitigate floatables pollution from its combined sewer system. We are reviewing this issue, including proposed changes to the New York State Department of Environmental Conservation (NYSDEC) / City of New York Administrative Consent Order covering CSO abatement. Some background is presented in the following paragraphs.

In 1992, the City of New York and the NYSDEC, with Environmental Protection Agency (EPA) participation, entered into an Administrative Consent Order which mandated several "interim" floatables abatement measures, plus a long term abatement program, building on many years of CSO abatement planning. These "interim" measures will be replaced by permanent CSO control infrastructure in the future. The interim measures include booming and skimming (with a number of skimmer boats) several of the City's major confined tributaries and also several open-water CSO points in the vicinity of bathing beaches. These measures capture floatables for approximately 50% of the City's total combined sewer drainage area.

The Order also committed the City to purchase and operate a large open water skimmer vessel that collects Harbor floatables slicks from all Harbor area sources prior to their reaching area beaches. In addition, the Order required a systematic survey of City catch basins and a replacement of catch basin hoods, where missing, to promote the capture of street-generated floatables.

NYSDEC has entered into negotiations with the City concerning non-compliance with the "catch basin" requirements of the CSO Order. EPA has initiated a consultation on and review of this issue with the NYSDEC. We anticipate that we will be in a position to provide you with a substantive response on this matter within approximately two weeks.

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If you have any further questions or need additional information, please let me know or have your staff contact Jeane Rosianski, Chief, Congressional and Intergovernmental Relations Branch at (212) 637-3654.

Thanks for hanging in there for us!

Sincerely,

Jeanne

Jeanne M. Fox
Regional Administrator

cc: Robert C. Shinn, Jr., Commissioner
New Jersey Department of
Environmental Protection

Michael D. Zagata, Commissioner
New York State Department of
Environmental Conservation

Senator CHAFEE. Senator Bond.

Senator BOND. Thank you very much, Mr. Chairman. With apologies to my authorizer colleagues, let me go back and make sure I understand your appropriations needs.

Did I understand you to say that if we can get $10 billion more into the SRF in the next 7 years, you think that would meet the objectives? Obviously this is going to depend upon the budget allocations, but frankly, with the declining dollars available in the discretionary budget, we may be able to put more money into the SRF now and have to bring that down as we find other environmental needs that would require added dollars because the overall budget under agreement now looks like it is not going to get any bigger.

Mr. PERCIASEPE. I understand that, Senator. I don't think there's any specific timeframe on that. If you could do more sooner than later, the key is that amount of money is an inflation hedge to the repayments that are going to come in the next 20 years which wasn't taken into account in the original bill. I might add this last State fiscal year that ended in July, we achieved the milestone of having over $1 billion of repayments back into the system. So with that additional amount, we will get to that other point.

Senator BOND. You mean an additional $10 billion?

Mr. PERCIASEPE. Into the State funds.

Senator BOND. Into the State funds. If we put more in this year, you're not going to complain if we have to put less in and less in, so long as we're getting to the $10 billion?

Mr. PERCIASEPE. No, I think it's the amount, not the individual year. This gets you off of the how much do you get in each year compared to $130 billion worth of needs. You get lost, I've got $1 billion or $2 billion and I've got $130 billion and this doesn't mean anything, but when you look at the whole thing and how the fund will work over the next 20 or 30 years and how much you need to get it to operate at that level, then you can come up with a rational financing plan and try to work it with whatever negotiation takes place. We try to create that objective as opposed to trying to figure out what the annual amount should be.

My advice is get the $10 billion over that period of time. We think it can be done.

Senator BOND. I will look forward to working with you on that one.

Another area of great interest to me, you mentioned nonpoint source pollution. This is an area of great interest to me and I've been doing a lot of work in Missouri with the universities and others. This is an area where I think there are potentially agricultural-horticultural solutions, things like agriforestry which have the potential of providing an economic incentive to farmers to grow commercially viable wood products which, during their growth, will act as a filter for impurities that otherwise would be washing off fields or our feedlots.

Is the research, is the activity in this area one in which the EPA participates or is this essentially related to the USDA and its ARS or the Soil Conservation Service, whatever they are calling it now? Are you playing a role in that?

Mr. PERCIASEPE. I think we have a lot of interaction. It would depend on the specific project, but there is an immense amount of cooperation between EPA and USDA and their research arm and the land grant colleges, and our Nonpoint Source Program through section 319 appropriations with the States.

Personally, I've been involved in my former job as a State person who actually was allowed to handle money as opposed to this job of just thinking about, but we provided grant funds to the University of Maryland which is the land grant college who has agricultural research stations in conjunction with USDA right next to Beltsville, which is one of their main places right up the road here doing that kind of specific watershed level research, looking at different land use practices, et cetera. So there is a lot of interaction.

Some of our programs like the Chesapeake Bay Program actually has a Soil Conservation Service person on the staff there.

Senator BOND. I would look forward to working with you on those.

I see my time is about expired. St. Louis, I've already mentioned, is faced with spending $2 billion to comply with the current sanitary sewer overflow. You may be aware that the city of Kansas City just finished a beautiful, new reconstruction of Brush Creek. It is an absolutely spectacular waterway through the scenic plaza area and it's getting sewage overflow in it. I would just be interested in knowing what is the status of negotiations with stakeholders and how you are looking at the sanitary sewer overflow policy?

Mr. PERCIASEPE. Right now, let me try to be clear on this because there is a lot of difference of opinion about this and you'll hear about this today, we think that sanitary sewers are a problem, the overflows from them, just from leaky sewers and they have effects and you've just mentioned one, and there are many places around the country. Should there be a national policy on this or not? Right now, it's left to the individual negotiations on each permit or enforcement action. We would like to see some policy framework that links decisionmaking there to these other wet weather-related activities that urban areas have to deal with so that they are not being pushed and pulled in a different water quality direction, let alone other municipal needs, but that we get the wet weather system of problem-solving together so that the data collection, the reporting, and ultimately the capital investments or operating investments that may be needed over time are coordinated on a priority basis.

We are looking for a policy that will help coordinate those things rather than leaving them to the discretion of individual actions. However, we don't want to have a national policy that tells you this is exactly the way you do sanitary sewer overflows, just as we've done with the combined sewer overflows where we tried to come up with a flexible framework.

Senator BOND. Thank you, Mr. Chairman.

Senator CHAFEE. Before Senator Warner, Senators Boxer and Inhofe have statements they would like to put in the record. We will put them in here. I believe you have a letter from the Mayor of Winston-Salem you'd like to put in the record?

Senator FAIRCLOTH. Yes, I do.

[The prepared statements of Senators Boxer and Inhofe follow:]

STATEMENT OF HON. BARBARA BOXER, U.S. SENATOR FROM THE STATE OF CALIFORNIA

Mr. Chairman, last year we worked very hard in this committee to write a reauthorization bill and thanks to your leadership, and the leadership of Senator Baucus, we successfully resolved scores of difficult issues and emerged with a balanced bill. Unfortunately it never reached the Senate floor due to lack of action in the House.

The Clean Water Act is one of our most successful environmental laws, and is responsible for significant improvements in the environmental health of the nation's rivers, lakes, coastal waters and estuaries. Our bill last year took a number of steps to extend that record of success to the unaddressed threats of our nation's waterways.

Today's hearing marks the beginning of a new effort to reauthorize the Clean Water Act. I am pleased that our first hearing is focussed on issues of concern to municipal governments since they play a critical role in implementing Clean Water Act requirements.

Although the Clean Water Act has resulted in remarkable progress over the past 20 years, sewage discharges and polluted runoff from urban areas continue to cause serious environmental, health and economic problems. California's $38 billion dollar tourist industry depends on safe and swimmable coastal waters and yet California beaches were closed over 1,300 times in 1993. In 1994, we had over 900 beach closures of which 300 were due to sanitary sewer overflows.

Federal appropriations for the State Revolving Fund are critically important in demonstrating our commitment to clean water. Since its inception in 1987, the revolving fund has played a fundamental role in helping states and municipalities finance wastewater treatment facilities. It is important that we send a clear message to the states regarding the Federal commitment to continuing this program. I continue to strongly support the reauthorization of the State Revolving Fund (which expired in 1994) and look forward to exploring ways to broaden the types of water quality protection projects that are eligible for this loan program.

Toxic pollutants in municipal stormwater discharge make it one of the top three causes of pollution in our rivers, lakes and coastal waters. In 1994, 12 beaches in California were temporarily closed solely due to stormwater runoff. I look forward to hearing EPA's testimony about progress being made in helping municipalities control discharges.

Combined sewer overflows are another serious nationwide problem. In my state of California, the city of Sacramento has a combined sewer system that has reached its breaking point. During major storms, combined sewer overflows, consisting of wastewater and stormwater runoff, back up into City streets. In addition, since the system's conveyance capacity is exceeded, sewer overflows flow into the Sacramento River. In 1990 the Regional Water Quality Control Board issued a cease and desist order in 1990, mainly as a result of the public health threats associated with outflows in City streets. Since that time, the drought and the City's emergency abatement measures have controlled the problem and enabled the City to develop a longterm solution. Last year's bill took positive steps in this area. It would have expanded State Revolving Fund eligible activities to include all combined system overflow project costs and it incorporated EPA's Combined system overflow control policy which reflected negotiated agreements between municipalities and environmentalists.

In closing Mr. Chairman, I would like to point out that in the last year, the EPA has taken important steps in streamlining Clean Water Act regulations, increasing flexibility for municipalities, and cutting red tape.

You may remember my San Diego bill that became law last year and that allowed the city of San Diego to apply for an EPA waiver from secondary treatment requirements. I am very pleased that last month, the EPA announced the granting of a 301 H waiver to the city of San Diego. The waiver means that San Diego will not have to spend $1 billion for construction of unnecessary secondary treatment facilities.

Moreover, earlier in the year I forwarded my concerns about the complexity and cost of the 301 H waiver application process to EPA Administrator Carol Browner. I asked the EPA to review the waiver process and see if we could find a way to help the city of San Diego and other coastal cities to cut down on waiver reapplication costs which cities have to incur every 5 years.

On November 8, 1995, Administrator Browner announced that the EPA will issue new streamlined regulations that will alleviate the need for cities to re-submit a full waiver application every 5 years. Instead, San Diego and other cities will only have provide the EPA with the information that is necessary to ensure that no environmental or public health problems will result from the continuance of the waiver. This is great progress that will help all coastal cities.

Thank you Mr. Chairman.

STATEMENT OF HON. JAMES M. INHOFE, U.S. SENATOR FROM THE STATE OF OKLAHOMA

Thank you, Mr. Chairman for holding this first of what I understand to be a series of hearings on the reauthorization of the Clean Water Act. The Committee has already held several hearings on Senator Faircloth's Wetlands Reform Bill, S. 851. I look forward to seeing in the near future, a complete Clean Water reauthorization package that includes the wetlands bill which Senators Faircloth and Johnston have indeed worked so hard on.

As a former congressman and member of the House Public Works and Transportation Committee, I am familiar with the issues that surround the clean water debate for municipalities. I look forward to hearing testimony from all of the witnesses on the issues involved such as State Revolving Loan Funds, Stormwater discharge, as well as Combined Sewer Overflows—an issue important to Oklahoma.

We are all affected by the Clean Water Act. We all want clean water. Oklahoma is no different from any other state in that regard. However, the differences become apparent when we consider this statute on a local basis. A shift toward more state and local responsibility would be welcomed. The House-passed Clean Water bill has received stark criticism from the Administration and others since this past May. However, the state and local role was addressed on target: "one-size-fits-all" standards and requirements that do not reflect regional and local differences are not helpful and downright unmanageable. I look forward to exploring options that provide for more flexibility for states and localities to address specific issues of concern to them. Reauthorization of the Clean Water Act provides a long awaited opportunity to examine and discuss the regulation of water quality in the context of past and future policies that could lead to greater environmental improvement at a lower cost. I look forward to this, and future hearings on this debate.

Senator CHAFEE. Fine, I'll put that in now too.

[The letter submitted by Senator Faircloth follows:]

CITY OF WINSTON-SALEM
PUBLIC WORKS DEPARTMENT
P.O. BOX 2511, WINSTON-SALEM, NORTH CAROLINA 27102

June 7, 1995

The Honorable Lauch Faircloth
The United States Senate
702 Hart Senate Office Building
Washington, D.C. 20510-3305

Dear Mr. Faircloth:

Per my telephone conversation with your staff member, George Howard, I am providing comments that we in Winston-Salem believe to be very important considerations to be taken by the Senate in its debate of the Clean Water Act Ammendments of 1995. It has become very clear through the U.S. House of Representatives passage of H.R. 961 that Congress understands that municipalities across American have had significant problems with the 1987 Reauthorization of the CWA that imposed the stormwater management mandate and H.R. 961 has clearly shown that Congress is willing to take the actions necessary to correct these problems.

Stormwater management has been correctly identified by H.R. 961 as a non-point source discharge and should be managed in this manner. Pollution from stormwater runoff is site specific and varies greatly in its impact from site to site, from municipality to municipality and from watershed to watershed and must be considered other than a point source discharge.

Utilization of local and private expertise in stormwater management can develop watershed specific programs to make measurable impacts on pollution reduction, thus State and Federal agencies charged with oversight of this program must incorporate this local input.

Those of us in Winston-Salem who have responsibility for carrying out these stormwater management programs believe that H.R. 961 uses a common sense approach that involves the Federal, State and local levels of government in participation with the citizens of Winston-Salem to effectively and economically reduce the pollution from stormwater runoff. Winston-Salem supports the passage of a stormwater management program such as HR 961 that:

- Makes stormwater a non-point source management program

- Requires that each state develop its own watershed specific programs

- Incorporates local government & industry input into management programs

- Relies on effective and cost beneficial attainment of pollution reduction

During the crafting and debate of H.R. 961 we worked with Congressman Richard Burr's office to provide input from Winston-Salem's prespective on the effectiveness and benefit of H.R. 961 and we are available to assist you and your staff as you may find necessary during the Senate's deliberations on the Clean Water Act Ammendments of 1995.

Sincerely,

Terry D. Cornett

Terry D. Cornett
Streets Superintendent

cc: Bryce A. Stuart, City Manager
P.W. Swann, Assistant City Manager/Public Works
George Howard

Senator CHAFEE. Senator Warner.

Senator WARNER. Mr. Chairman, I'm glad to see my good friend and fellow member of the committee, Senator Faircloth here because as the witnesses well know, the States of North Carolina and Virginia have, for some 13 years, had differences of opinion about a water project involving Lake Gaston. I'd like to put a second statement in the record with regard to Lake Gaston.

[The statement follows:]

STATEMENT BY HON. JOHN WARNER, ON LAKE GASTON MATTER

Mr. Perciasepe, I realize that the focus of today's hearing is on issues of interest to municipal governments like the state revolving fund (SRF), the stormwater permit program and combined sewer overflows. These are important issues and I am sure we will have an excellent discussion of them.

I want to call your attention to an issue that, although it is not on today's agenda, is very important to a municipality in my state—the City of Virginia Beach. That issue concerns section 401 of the Clean Water Act.

As you know, the City has been trying for more than 13 years to build a pipeline to deliver desperately needed drinking water to the residents of Virginia Beach. This past summer, Virginia Beach got the final go-ahead from the Federal Energy Regulatory Commission and is moving forward on construction of the pipeline.

That progress is threatened, however, by the State of North Carolina using section 401 of the Clean Water Act.

Mr. Perciasepe, I will not press you today on how section 401 ought to work. However, it is an issue of great importance to me and I wanted to put you on notice that we will have an extended discussion about section 401 at a future hearing.

Thank you.

Senator WARNER. Senator Robb and I have been working on this. We feel that the bill that has been put by my distinguished colleague from North Carolina on this subject, S. 1413, which seeks to amend section 401 of the Clean Water Act to address the interstate disputes regarding water withdrawals, in my view and that of Senator Robb, the existing provisions of the Clean Water Act, namely section 401(a)(2) already addresses the issue and therefore, there is no need for further legislative remedy via the Clean Water Act.

Frankly, this dispute between these two States is most regrettable—13 years, if you can imagine that, millions and millions of dollars of legal fees and court suits and Federal and State action. The point is that I'm just doubtful that the Congress can or should really get involved to try and settle this. I think the existing framework of legislation is very clear.

If I may turn to a second matter here, Mr. Chairman, a number of communities in my State have initiated construction to meet the Federal mandate to control combined sewer overflows and the EPA's CSO policy. These communities will use primarily local funds to pay construction costs through various bond and loan arrangements. What is the status of compliance by other CSO communities throughout the Nation? Have most cities begun construction or are they only in the planning stage?

Mr. PERCIASEPE. Senator, I'm not going to be able to give you the statistics, but I can tell you that there are still over 1,000 communities in the country that have related CSO problems and we are in various stages of attacking those problems with those communities and with the States. I don't think there is one that doesn't have something going on in terms of the planning, engineering, or construction.

There are many other communities that have done something in the past where they were able to separate them, or in places like Chicago where they are building big systems to deal with stormwater and some of the combined sewer problems they have, so there is a whole range of activities going on.

If you like, I could prepare for the record, if that would be acceptable to you, sort of an update on the statistics of how many there are, how many have been corrected?

Senator WARNER. A brief one would be fine.

The EPA 1994 Municipal Wastewater Needs Survey reported $145 billion in construction needs to meet the permitted requirements. This overall amount included $42 billion to meet the CSO control requirements, about half of which is based on permitted needs and half of the needs estimated or modeled from the assumptions of the agency's CSO policy.

Two cities in my State alone have estimated costs at over $600 million to meet the State orders. It's my understanding the city of New York alone estimated costs of approximately $16 billion to comply with the CSO requirements. I'm concerned the Federal Government does not have a complete survey of the costs necessary to meet the CSO mandate. Will EPA conduct a needs survey in 1996 as provided by the Clean Water Act and will CSO construction needs be counted on a city by city basis?

Mr. PERCIASEPE. Yes, we will conduct a needs survey because we do this with the States and I will make sure they get down to that level. The normal way it's done is it is done at that level, at the State level. We do a review of it and we are the compilers of it. So we will do any kind of verification that needs to be done on that.

Senator WARNER. On Monday, the Washington Post reported that communities and States are going to need "a lot more money" in the words of a Pennsylvania official to clean up the Chesapeake Bay by cutting the flow of nitrogen and phosphorous by 40 percent by the year 2000 as planned in 1987. This is a project I've worked on since I've been in the Senate, Mr. Chairman. You will recall Senator Mathias was a real crusader on this.

The article also reported that $675 million worth of local government construction was estimated to meet the Chesapeake objective. Does the year 2000 goal for the Chesapeake Bay remain achievable and reasonable?

Mr. PERCIASEPE. Let me say that the States involved with the Chesapeake Bay cleanup have made tremendous progress in the last 5 years as an imperative in those States. You know as well as anybody the public support to do this and the agricultural community has been heavily involved and supportive, and we've gotten to the point now where we're almost at 50 percent of meeting that goal of reducing the nutrients by 40 percent. We still have 4 years to go until the end of this century when the goal was set.

It seems to me that it's premature to declare ourselves unable to meet this goal. However, I don't think there is a need to change the goal. If there is a reevaluation planned by the Governors in 1998 specifically scheduled to be able to look at this situation and if they decide to get to the goal is going to require a few more years, I'm sure the public will accept if given a concrete plan on how that will be done. It's taken 300 years to get to this point; another 2 or 3 years or something won't be the end of the world. I think they will have to lay out how that will be done.

Senator WARNER. I know my time has expired but last, since the loans from the SRF Loan Program have to be paid back from user charged funds, shouldn't the States have the flexibility to make grants from the SRF for any size?

Mr. PERCIASEPE. Any size municipality?

Senator WARNER. Yes, any size municipality or community.

Mr. PERCIASEPE. I think there are two ways to attack this. You could do it on a size, say communities with a flow or population below this level, the State would have the opportunity to provide some further financial assistance either in loan forgiveness or whatever or you could say it's got to be on a needs basis where you look at the financial capability or the wealth perhaps of the residents using census and other data. There are two different ways to go on that and certainly I'd be willing to work with the committee on that.

Senator WARNER. I thank the chair and the members. I'd like to put in another question for the record.

I want to say in conclusion, Mr. Chairman, this is a very fine public servant here. We've worked together for many years and he's tough but he's fair and that's the best that can be said about anybody.

Mr. PERCIASEPE. I appreciate that.

Senator CHAFEE. I'd also note that I came to the Senate some time ago and when I came, there was a problem between Virginia and North Carolina over Lake Gaston. That was 20 years ago. When I retire from this place, I hope this problem has been settled by then.

[Laughter.]

Senator WARNER. I have to say, Mr. Chairman, that I think it should not be settled by the Congress but settled through the executive branches of the prospective States and the Federal Government. I see how Senators could, with totally conflicting viewpoints understandably, there they stand like a stonewall as anything tries to move through the floor of the Senate.

Senator CHAFEE. I can truthfully say I have no dog in this fight.

[Laughter.]

Senator CHAFEE. Senator Thomas.

Senator THOMAS. Thank you, Mr. Chairman.

My observations are more general. I haven't been on this committee as long as others. I don't think I have quite the ownership in it as some, so it seems to me that reauthorizations are reviews to talk about successes. Indeed, there are. There apparently aren't all successes, however, and it seems to me that we have a responsibility also to talk about things that might in fact be changed. Obviously, not everyone things the program is a total success.

If you were to list very briefly two or three items in the statute that need to be changed to allow you to do your job, what would they be?

Mr. PERCIASEPE. I think that a reauthorization of the Revolving Fund and the financial commitment to nonpoint source control under section 319 are imperatives to provide that kind of congressional long-term stability to those funding sources so the bond markets and the planning that needs to go on to make that work has some kind of horizon. I think it's very essential that we do that.

Second, I think some of these wet weather issues in municipalities that we've been talking about, whether it be combined sewer overflows, stormwater, et cetera, there are some flexibilities that could be added to the law. We had a very good attempt in the last Congress and we came very close near the end. There are certainly some frameworks that we can work with that provide a little more flexibility but still maintain the accountability and the integrity toward the goal. So I think there is room there to work.

Adding some more frameworks and incentives for moving the water quality programs at the State level to a watershed basis where the flexibility can be employed with a new level of accountability at a watershed level, I think these are things that are worth pursuing.

Senator THOMAS. I'm always a little skeptical of flexibility. I don't know what that means. I don't know whether that means some local people will have some input, whether that means the State will have some meaningful input, whether it means the EPA will still make all the decisions and will talk to you about it after.

Mr. PERCIASEPE. I think the Water Quality Program is profoundly different than many other environmental programs in the country in that the States are the primary agent and EPA does provide frameworks and regulations that have to be dealt with, but what I'm talking about at a watershed level is if you look at an entire watershed and see what it's water quality needs are and it allows you to make some decisions between sources, but the flexibility without some unit of accountability, that you can communicate to the public and to anyone else that the success is being made and the goals are being achieved.

Senator THOMAS. So here today, it's important for an amendment in the stormwater provision to provide for cost effectiveness, maybe cost-benefit ratios. Does that make sense to you?

Mr. PERCIASEPE. I think the program is built on a framework that has the flexibility to be cost effective in it. We need to be working harder with the municipalities to realize that existing flexibility and programmatic imperative. That's why we've set up these work groups with municipalities, with the environmental community, and others to try to find these.

Senator THOMAS. Work groups, I go back to what I said a few moments ago, and I don't know this, I'm asking. We have lots of these kinds of work groups and lots of advisory committees, and lots of listening groups, but that doesn't convert any of the decisionmaking to anyone else. Does this have some impact on the final decision or do we just go through the motions?

Mr. PERCIASEPE. I would hope it would have an impact; that's the objective, that it would do it. We have a judge's framework in which we have to do something and we have a law that pushes us to get the answers to the judge and to others in a timely fashion.

Senator THOMAS. You do understand that not everybody agrees there is great flexibility? In fact, we probably hear more than anything else from home that EPA has told us we have to do this and by golly, that's the way it is. You do hear that, don't you?

Mr. PERCIASEPE. I used to hear that when I was at a State, I hear it now and I have to say, some of it may have some truth to it and some of it doesn't.

Senator THOMAS. What about the notion that EPA's statistics indicate the average cost of a stormwater permit exceeds $625,000?

Mr. PERCIASEPE. It depends on what you're adding in there in terms of the analysis that is needed to be cost-effective. You can't just be shooting blanks at a target that is so widespread that you're not focused. Some cities don't even have—this is getting less and less the case—basic maps of their infrastructure. I know that we used to have parchments in the city of Baltimore that we had to convert to maps. Some of the records are very old and need to be converted so you can even do the plan to do the attack. So there is a lot of embedded costs up front in terms of getting ready to do things on a cost-effective basis. So I can't argue with what the costs people are reporting are.

Senator THOMAS. So you wouldn't argue with that statement?

Mr. PERCIASEPE. No. I would argue with whether there's anything in there that's inappropriate.

Senator THOMAS. I understand what you're saying.

I'm really hopeful that these kinds of hearings can be useful and not simply sort of a self-analysis that is seldom critical and so I would expect you to go through the successes and there are successes. I would also expect you to take an insightive look at yourself and say, what can we do that's better because clearly as you well know, we hear a lot of that, that things could be done more efficiently, more effectively, that there could be more of a real voice coming in from the States. I guess that's my hope, that we can do that.

Mr. PERCIASEPE. I share those concerns and I feel as a responsible public official that I have to keep marching ahead to do that. I think we had made some attempts in the last year on the stormwater issue, I think we made some very good progress if we continue that mode as we get into the actual legislation and today we are just doing a what is the issue kind of hearing, but when we get into the legislation, if we can sit down and work together on some of the things that do the accountability and flexibility thing, I think we're all right.

Senator THOMAS. I'm just concerned sometimes that if you came in from Mars and listened to this, you'd think, God, everything is perfect, we don't need to make any changes at all. That's not the case.

Mr. PERCIASEPE. I gave you a list of things I think we can work on.

Senator CHAFEE. Thank you.

Senator Graham.

Senator GRAHAM. I would like to add my voice to what Senator Warner and what you said, Mr. Chairman, about the job that Mr. Perciasepe is doing for the country and for the cause of clean water in America. I have had an opportunity to work with him and have been very impressed with his pragmatism and his commitment. I have a bias because he brings to his current role his experience at the State level and I think that's an especially valuable attribute.

So I want to take this occasion to publicly thank Bob for the outstanding work that he's doing.

I'd like to ask some questions that specifically relate to the State Revolving Fund. In the Safe Drinking Water Act, there was a provision that beginning in a couple of years, we would move toward a needs-based assessment of funding and that would become the basis of allocation. We are on the same track of a needs-based allocation formula for the Clean Water Act. Could you give us a status report as to where we are on that and you would see it to be implemented? Will any changes in law be required in this reauthorization bill in order to implement a needs-based allocation?

Mr. PERCIASEPE. On the Safe Drinking Water Act, we hope to have the first national needs survey done in late winter or early spring of 1996. We're on track to do that. We have gotten some of the State input in. I think that is on track and that will help inform that decision.

On the Clean Water needs survey, obviously we have needs surveys that have been completed since the last formula was enacted in 1987 and we will have another one in several years. As the Congress looks at the formula and doing needs-based adjustments, we stand ready to provide whatever technical assistance you would want.

Senator GRAHAM. You say you'll have a needs-based assessment in the Clean Water Act in several years. Could you be more specific?

Mr. PERCIASEPE. I would try to be more specific if I could, Senator, but my brain is not telling me what the date is on that right now, but I can certainly find out before the end of the hearing.

Senator GRAHAM. If you could provide us with that information as well as your recommendations as to what statutory changes, if any, would be required in order to sanction the use of that needs-based assessment for purposes of allocation?

Mr. PERCIASEPE. You know the numbers are actually in the law, so if you're going to change the numbers, you're going to have to change the law.

Senator GRAHAM. Would it be your position, the position of EPA, that we should move toward a needs-based allocation of the Clean Water Act State Revolving Fund as we are committed to do with the Safe Drinking Water funds?

Mr. PERCIASEPE. I believe the existing formula is based on the needs that were understood at the time it was created and certainly to the extent the needs have changed, and we can provide that kind of information to the Congress, we think any formula ought to be based on needs, not on some other arbitrary concept.

Senator GRAHAM. That gets me to the second question which is how the State utilizes its Revolving Fund money because if needs are arrived at by a formula that includes an assessment of what are the unmet requirements in order to come into compliance with Clean Water Act standards and particularly, projecting those into the future and then comparing that to resources available to meet those currently unmet needs, how a State utilizes its revolving fund is a factor in what those resources are.

In my State of Florida, we adopted a State Revolving Fund prior to the adoption of the Clean Water Act; it was a State-funded program and it was focused on what we found to be the greatest problem of our municipalities and that was construction finance, not permanent finance, so our revolving fund was targeted at providing localities on an interest subsidy basis funding for the construction period of their various municipal facilities, then with the expectation that they would secure permanent financing in the private marketplace and replenish the fund so that it could be used for the next municipality's construction finance needs.

I was frankly surprised when I first found out that was not the way in which the State Revolving Fund under the Clean Water Act was being utilized but rather was being used for permanent financing. Could you comment as to whether it is appropriate to continue to sanction the use of the Clean Water Act Revolving Fund for permanent financing as distinct from focusing it on construction financing?

Mr. PERCIASEPE. I think under any scenario, the SRF ought to go to financing the facilities, not the operations of the facilities. Let me make that distinction if there was any confusion on that and I think that is what it is intended to do, and legally is required to be done. There are a host of options that States have available to them on how they utilize the fund in a financial way. They could take the money from the Federal Government, put it into an account and make the loans directly with that capital corpus and then when the repayments come back, make it back. They could take that money—this is a simple model—which is at say 0 percent interest rate, it doesn't cost the State anything because they don't have to pay the Federal Government back, and then they could borrow an equal amount. Say they have $20 million in there, they can borrow on the revenue bond market, $20 million more say at 6 percent and put it together and in theory you have $40 million at 3 percent and you put out $40 million in loans at 3 percent, you're saving the ratepayers a significant amount of money in providing the capital that some communities don't have access to because they haven't been rated or whatever.

There are many options that States have come up with in terms of how to achieve that simple leveraging and I wouldn't want to see any constraints on that inside the bounds of good fiscal management and bond market regulation. So I would err on the side of maintaining whatever flexibilities are needed.

In terms of the municipality finding their other financing and then paying back a lump sum to the fund, I don't think that is precluded. If they decide they want to lock in some other rate and some other market, and they refinance again outside the SRF refinancing, although I must say it usually goes the other way, usually people refinance with the SRF to get a lower rate than they had on the regular bond market, but if it went the other way, I don't think that's a problem. It could be done and the money would go back to the SRF to be reloaned again by the State to somebody else.

I'm wandering a bit, Senator, because I want to make sure I'm getting what you're talking about.

Senator GRAHAM. My time is up and you indicated you're going to be providing some——

Senator CHAFEE. Senator, you're the last questioner of this witness, so if you want to go a little further, that's fine. We do have other witnesses I want to get to but here's a chance to ask something of this witness if you'd like.

Senator GRAHAM. Bob, I'd ask if you could provide some supplemental information on the needs-based allocation?

Mr. PERCIASEPE. I can do that.

Senator GRAHAM. My point is this. If you're going to have a needs-based formula and part of that formula is resources that are available to the States to meet their physical, unmet needs, their "ph" physical as opposed to their fiscal, then you have to have some method by which the resources are evaluated on a consistent basis. You have some States using their State revolving fund as I indicated mine had been doing which was for construction finance, they are going to indicate greater amount of resources because they are turning it over so much faster. States which elect to use their State revolving funds for permanent finance are going to indicate fewer resources because they are going to be tied up for extended periods of time.

You have to have some methodology in your needs-based assessment in order to treat those two different decisions at the State level in a parity manner. I would hope that as you provide the supplemental information, you could give some attention to how to deal with that maintenance of a parity within the needs-based formula if, as you indicate, you believe we should which is to continue to allow States to have the flexibility to do a range of financing with their revolving fund resources.

Mr. PERCIASEPE. When I was talking to Senator Bond earlier about how much money would be needed nationally as if it was one big revolving fund, making repayments over $2 billion a year, adjusted for inflation out into the future, that made a lot of assumptions about all those different State programs, as you might imagine. We do have the capability of running that model on a State level with the specific assumptions that a State has. It puts out a printout like this that shows how much money is available over the course of time based on the assumptions going in. So we made aggregate assumptions on the total amount that would be needed. Certainly if there is a specific issue, we could do that and I think we should work that into how the needs or how the demand side of the money is worked out.

Senator GRAHAM. Thank you, Mr. Chairman.

Senator CHAFEE. Thank you very much, Mr. Perciasepe. We appreciate your being here.

The next panel consists of: Mayor Wennberg; Mr. Paul Pinault from The Narragansett Bay Commission in Providence; Paul Marchetti, executive director, Pennsylvania Infrastructure Investment Authority; and Ms. Jessica Landman.

I know we've got two witnesses after this and everybody has been very patient, so if each of you would make your presentation in 5 minutes or less, we'll have the light.

Why don't you proceed, Mayor Wennberg? We're glad you're here. You've testified here before.

STATEMENT OF HON. JEFFREY WENNBERG, MAYOR, RUTLAND, VT, ON BEHALF OF THE NATIONAL LEAGUE OF CITIES

Mayor WENNBERG. Yes, and thank you, Mr. Chairman. It's a pleasure to be back.

Mr. Chairman, members of the committee, I'm Jeff Wennberg, Mayor of Rutland, VT, and a member of EPA's Urban Wet Weather Flows Advisory Committee. I'm here to offer testimony on behalf of the National League of Cities and the 15,000 municipalities we represent regarding issues critical to us in the Clean Water Act. My testimony focuses on the Stormwater Program.

Our Nation has made significant progress in restoring the health of our waters due largely to the Federal financial commitment to the reduction of point sources of pollution. The success of the Point Source Program has encouraged the application of the same approach to the nonpoint source problem. The Federal perspective is simply the application of a proven tool to address a new challenge. The local perspective is radically different.

Point source wastewater is accepted into a system which is controlled by the regulated authority. The nature of the discharge is consistent from day to day. The application of technologies to remove known pollutants in predictable concentrations has rendered engineering and operating centralized treatment facilities more of a science and less of a gamble for operators and ratepayers alike. There exists legal authority for operators to monitor, regulate and if necessary, reject the discharge of harmful pollutants into the system.

Stormwater shares none of these characteristics. While the physical flow of stormwater is sometimes managed, its rate of flow and chemical content vary wildly. There does not even exist proven removal technologies that could reliably achieve water quality standards. Existing standards themselves are based upon dry weather conditions in the receiving waters.

Finally, stormwater contaminants often include substantial contributions from sources such as atmospheric deposition, automotive fluid leaks and brakelines which are all well beyond the control of local authorities. Even the degree to which stormwater is a significant issue depends upon community size, patterns of development, climate, the biology and hydrology of receiving waters. Runoff from urban streets represents less than 15 percent of the current pollutant loadings while runoff from farms, ranches, mines, and forestry operations represents more than 80 percent. Nevertheless, the current program seems to assume that if we could eliminate municipal stormwater runoff, our lakes, rivers, and streams would magically meet water quality standards. This is untrue and its consequences are unfair. It would be like asking dog owners to finance 100 percent of the municipal program through astronomical license fees because dogs don't use sewage treatment plants.

The Stormwater Management Program requires municipal taxpayers to unfairly bear the greatest burden for wet weather pollution, despite the fact that municipalities have little or no control over those who do most of the polluting.

A recent national television network program on senseless Federal regulations opened with the Stormwater Program, a telling commentary in itself given all the material with which they could have worked. On the program, a Maricopa County, AZ, official stood in a dry riverbed as she explained that EPA's regulations required the county to monthly monitor the nonexistent water at $20,000 to assure that the fish weren't adversely affected.

While the current round of permits do not, for the most part, include numerical effluent limits, State regulators, the permit issuers, anticipate that the next round will include such limits. As NLC has stated in the past, no one, not Congress, not EPA, not environmental special interests, and certainly not this Nation's cities, know how to meet specific numerical limits for stormwater discharges.

Is the program cost effective? EPA statistics show the average cost of a municipal stormwater permit exceeds $625,000. That's $625,000 for one permit, not the removal or reduction of a single pollutant from a single stream. A recent survey indicates that the implementation costs are currently ranging from $250,000 to $20 million annually. Given that the current Stormwater Management Program requires municipalities to meet unobtainable objectives at an excessive cost for an unmeasurable benefit, one would have to conclude that the program is not cost effective.

While stormwater contamination may be a first priority in some communities, nationally, local officials rarely find this to be the case. Often numerous other issues pose a far greater risk to the public health and the environment than contaminated stormwater. The failure to respond to local priorities runs the risk of allowing greater damage to the environment and public health by diverting resources away from those priorities. We also risk the loss of public support by imposing false priorities from outside the community.

NLC believes to accomplish the objectives of wet weather pollution abatement, Congress must, first, repeal the existing Stormwater Management Program; second, provide research to determine the magnitude and extent of the problem; third, provide funding to determine the benefits of best management practices and other techniques; fourth, provide funding for the development of systems and technologies which affordably and reliably remove contaminants and finally, enact a new program which focuses attention on those regions where the environmental risks are the greatest, addresses stormwater pollution abatement on a watershed basis looking at all nonpoint sources, not just municipal, and is cost effective and based upon improvements in the receiving waters' quality and not end-of-the-pipe measurements.

I want to thank the committee for the opportunity to offer this local government perspective on this important issue. I also want to thank the committee very much for your leadership and the very successful, unanimous Senate approval of the Safe Drinking Water Act amendments, quite an achievement.

Senator CHAFEE. Thank you, and you folks were helpful to us in that and I want to express my appreciation to you and the National League of Cities.

Mr. Paul Pinault from The Narragansett Bay Commission.

STATEMENT OF PAUL PINAULT, EXECUTIVE DIRECTOR, NARRAGANSETT BAY COMMISSION, ON BEHALF OF THE ASSOCIATION OF METROPOLITAN SEWAGE AGENCIES

Mr. PINAULT. Thank you, Mr. Chairman.

I am pleased to be here today to provide AMSA's perspective concerning critical municipal issues in the context of reauthorization of the Clean Water Act. AMSA supports reauthorization of the Clean Water Act and believes there is a need for a bold, new direction for our future clean water efforts. We must maintain the progress that we have made and chart a future course that recognizes both the contributions made and constraints faced by our Nation's cities in protecting water quality. To do this, we need continued Federal funding to both fully capitalize the State Revolving Loan Program and to bolster our efforts through grants.

In addition, AMSA believes that a national program of comprehensive watershed management should serve as the backbone of the reauthorized Act. The issues of combined sewer overflows, urban stormwater management and sanitary sewer overflows represent a wet weather phenomena that intermittently affects water quality; yet, the Act does not coordinate these programs within the watershed context. Nor have we explored the establishment of wet weather water quality standards to ensure water quality goals are met and scarce resources are not unnecessarily spent.

As you consider amendments to the Act, we urge you to include provisions which allow the consideration of all wet weather phenomena in an integrated fashion and establish the mechanism to develop wet weather water quality standards including site specific standards.

AMSA was a key stakeholder in the 2 years of regulatory negotiations that resulted in Administration-approved national combined sewer overflow policy. This cooperative effort to develop a reasonable and environmentally sound approach to the difficult and costly issue of CSO control has allowed for the development of programs to address this pollution source. However, the CSO policy does not reflect regulation or actual requirements of the Act, but instead provides guidance to EPA's regulatory program. Litigation regarding CSO requirements and the statutory deadline applicable to those requirements remains a threat under current law. AMSA strongly urges Congress to codify the policy by reference and establish a new statutory deadline in the reauthorized Act.

Our national program to control stormwater is clearly in need of reform. AMSA supports amendments to the stormwater management provisions of the Act to build in consideration for cost effectiveness and viability with regard to program implementation. A reauthorized Stormwater Management Program should reflect a comprehensive national strategy to ensure that municipalities and other stakeholders engage in a comprehensive and coordinated planning effort to achieve cost-effective stormwater management that ultimately meets appropriate health and environmental objectives and requirements. Such a program should recognize the site specific nature of stormwater and its impacts and provide the necessary flexibility to tailor a management program to local situations.

Along with our national programs to control CSOs and stormwater discharges, a third initiative is currently underway to address the wet weather issue of sanitary sewer overflows. It is AMSA's view that the reauthorized Act should require EPA to develop a policy framework for controlling sanitary sewer overflows and the overall context of watershed management within 2 years of enactment.

Perhaps a real life example of how national policies play out at the local level will help illustrate our testimony. As you're well aware, the cities that my commission serves typify older urban areas of the northeast that are beset by the problems of older cities and are typified by populations with low income levels. The issue before my commission with regard to combined sewer overflows is one, most simply put, of cost.

In March 1993, our commission completed a long-term control plan for the abatement of CSOs within our district. The recommended plan has an estimated implementation cost of $500 million in 1995 dollars to control 3 billion gallons per year of CSO flow. This compares to the $100 million that we have spent over the past 10 years rebuilding our two wastewater treatment facilities to handle annual dry weather flows of 25 billion gallons year in and year out.

To put this into perspective, the capital cost to treat a gallon of our CSO flow would be approximately 40 times greater than we spend to treat a gallon of our dry weather flows. This substantial difference demonstrates that we are reaching the point of diminishing returns on expenditure of dollars for pollution control.

Privatization of public services and infrastructure is also garnering much interest nationwide as all levels of government struggle to cope with increasing funding constraints. Last week, AMSA convened a special meeting to discuss member experiences with privatization efforts and began the process to develop a strategy to allow both the Association and its individual member agencies to effectively respond to the challenges and opportunities presented in this context. We look forward to sharing our experiences with you over the next several months.

Mr. Chairman, AMSA commends you for your leadership and looks forward to working with all members of your committee as deliberations on the Clean Water Act proceed. We urge you to move swiftly to reauthorize this important statute early next year.

This concludes my testimony and I would be glad to respond to any questions you might have.

Senator CHAFEE. Thank you very much, Mr. Pinault. That was extremely interesting, particularly the cost of treating the CSO waters.

Mr. Marchetti.

STATEMENT OF PAUL MARCHETTI, EXECUTIVE DIRECTOR, PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY, AND PRESIDENT, COUNCIL OF INFRASTRUCTURE FINANCING AUTHORITIES

Mr. MARCHETTI. Thank you, Mr. Chairman.

Senator CHAFEE. Mr. Marchetti, first, could you tell us briefly what the Pennsylvania Infrastructure Investment Authority is? Is that your State revolving fund?

Mr. MARCHETTI. Yes, it is. We manage the SRF as well as State funds that are used for both drinking water and wastewater. Actually, our State fund is about twice the size of our SRF program.

Senator CHAFEE. If you'd go ahead with your statement, please?

Mr. MARCHETTI. I'm executive director of the Pennsylvania Infrastructure Investment Authority and appear today as the President of the Council of Infrastructure Financing Authorities, otherwise known as CIFA.

I want to thank you for the opportunity to be here and to commend you as well as the rest of the committee for initiating these hearings and initiating work on reauthorization of the Clean Water Act.

I have basically two points which I'd like to make to the committee this morning. The first pretty much echoes what you've already heard and that is the success that the SRF Program has been since Congress created it back in 1987. CIFA believes this is a very innovative program, a very flexible program, and Congress was very visionary actually in creating it and providing States with the ability to use this funding in ways that are tailored to the needs of the individual States but at the same time, accomplish the purposes Congress has in mind.

Since 1987, there have been approximately 3,000 SRF loans made for a total funding of a little over $14 billion. This has been a combination of Federal money of about $11 billion, SRF as well as money that was transferred from the Construction Grants Program, State match money of about $2.4 billion and leveraging on the part of many States of about $5.4 billion. That has totaled in capacity now to about $19 billion in terms of funding capacity at the moment. That capacity is continuing to grow, both with continued leveraging on the parts of many States as well as with loan repayments. The States have received a little over $1 billion in loan repayments to date and anticipate next year getting another $1 billion and that will continue over time. With the combination of all this funding, this program will continue to effectively address many of the needs the States have.

To take a couple of examples of the flexibility in this program, about a third of the loans have been made to small communities which in Pennsylvania is a big issue for me, but nationwide, it's been about a third of the loans which have gone to communities with populations of 3,000 or less. About 40 percent of the loans, on the other hand, have gone to larger communities with populations of $100,000 or more. This demonstrates, I think, the flexibility of the program and the adaptability to different needs in different States.

Most of the funding to date has gone to treatment works, to 12 projects. States are starting to move into other areas—nonpoint source, agricultural runoff control, loans to homeowners to correct septic system problems, and various other types of nonpoint source pollution that is an emerging part of this program. I think that funding will continue to grow in the future, although I still would anticipate that most of the funding would go to traditional 212 projects.

In any event, this program has been very successful to date and I believe it is going to continue to be successful and meet our needs as well as those of Congress.

On the other hand, I would like to say that my second point is that the authorization for this program, as you well know, ceased in October 1994 and since then, there's been a lot of uncertainty in the States as to what is going to happen with the program. We don't know if we're going to get more funding from Congress which we desperately need; and we don't know, if we do, what we'll be able to do with that funding.

To take a couple of examples, there has been a lot of talk in previous legislative proposals about providing for disadvantaged communities in terms of extended loan terms or partial grants, and communities across the Nation know this and I've given some examples from Pennsylvania where communities that we have loan offers to or we know could come in for funding are just holding off closing loans with us in anticipation of hopefully being able to get more favorable terms in the future. These are disadvantaged communities; these are communities that really do need the additional assistance that could be forthcoming with reauthorization, but in the meantime, they're waiting, we're waiting and the environmental problems that need to be addressed continue to occur, and the costs of these projects escalates with time. That's a terrible shame, particularly since it's the poor communities that are waiting and who can least afford to pay higher costs.

In addition, when authorization expired in 1994, a lot of the title II requirements went away and States are uncertain as to whether or not they should continue to apply those requirements. That is another area of uncertainty.

For these reasons, we'd just urge the committee and Congress to reauthorize this Act and move on that as quickly as possible. This uncertainty is really creating a lot of difficulties in State management and creating difficulties for local communities.

I want to thank the committee for taking the initiative, and I want to commend you for starting work on this. I want to encourage you to continue this work and offer CIFA's assistance in any way possible to work with you on any legislation that may be forthcoming.

Senator CHAFEE. You'd like the 30 years for the disadvantaged communities, is that it?

Mr. MARCHETTI. Right. I picked 30 years because in Pennsylvania when we fund projects with State money only, we do go out to 30 years for disadvantaged communities.

Senator CHAFEE. Fine. Thank you very much.

Ms. Jessica Landman from Natural Resources Defense Council, NRDC.

STATEMENT OF JESSICA LANDMAN, SENIOR ATTORNEY, NATURAL RESOURCES DEFENSE COUNCIL, INC.

Ms. LANDMAN. Thank you, Mr. Chairman.

I am accompanied today by my colleague Peter Lehner who is an expert on stormwater, if questions are asked.

Since 1972 when Congress established the national ambitious goals of fishable and swimmable waters by 1985, we have made major progress around the country but, as Mr. Perciasepe outlined this morning, we still have a long way to go. We hope that the Senate is going to keep the Clean Water Act on track with this year's reauthorization efforts, to strengthen the law in those narrow areas where changes are still needed.

We, and others in the environmental community, were really appalled by the actions taken in the House earlier this year in adopting H.R. 961, a bill that literally snatches defeat from the jaws of victory by weakening current law rather than meeting the remaining challenges of water quality head-on. We're looking forward to working with the Senate and instead moving us in the direction of strengthening rather than weakening existing law.

Senator CHAFEE. Aren't you glad the Senate is here?

[Laughter.]

Ms. LANDMAN. It brings back all those lessons of constitutional law. Yes, indeed.

Municipalities, the subject of today's hearing, have worked very hard—with lots of financial and legal support as well from the Federal and State governments—to clean up their act, and along with industrial point source dischargers, the progress that we've made in addressing municipal sewage treatment problems has been among the most impressive successes of the Clean Water Act.

Municipal pollution problems are still very severe, if somewhat localized. We aren't nearly as far along in addressing combined sewer overflows, stormwater pollution, and sanitary sewer overflow problems. The bottom line is that these sources still continue to pollute our waters, close our beaches, contaminate our fish, and hamper urban revitalization efforts.

Fortunately, the Clean Water Act does give us an excellent set of tools to address these problems. We need to buckle down and use them in practical and cost-effective ways. We do not need to rollback the law's requirements and we do not need to retreat from the goals of the Clean Water Act of achieving fishable and swimmable waters.

Let me speak first about stormwater. As we heard earlier, urban stormwater is a major pollution source; it ranks second or third in polluting our rivers, lakes, and estuaries. It closes swimming and shellfishing areas throughout the Nation. What we need to do today is to continue to implement the stormwater provisions that were adopted by this Congress in 1987 for large cities and for heavy industry. At the same time, we acknowledge that so far, the implementation of those 1987 provisions has been cumbersome and burdensome. We need to improve implementation of the 1987 law's implementation through administrative reforms. We need better and more streamlined monitoring and reporting, for example. We need performance standards so that the cities and industries know what is expected of them, standards that are flexible and targeted, but that tell cities what they need to do. Most important, we need to continue to strive to meet our fishable and swimmable goals.

For smaller cities and for commercial facilities not covered under the Phase I Stormwater Program, we need to phase-in a sensible program that targets the most significant sources. The exact out-lines of the Phase II Program are still being developed, using a very promising negotiation process that EPA has established which gives all interested stakeholders a seat at the bargaining table. EPA, incidentally, has administratively extended the deadline that would have applied to these Phase II dischargers, relieving a concern that smaller cities had expressed earlier.

There are two things we do not need at the moment. First, we do not need stormwater permits for cities that set numerical limits on specific pollutants, but neither NRDC, nor EPA, nor anybody else is asking for or writing such permits now or is planning to do so in the next cycle of permitting (as has been implied today). The issue a red herring issue.

The second thing that we do not need is legislative changes that would relax the existing law's requirements or deadlines. If such changes were made in the law today, the negotiating process that EPA has initiated would be derailed.

Combined sewer overflows offer us a good case study on how we have moved ahead successfully with a practical solution to a longstanding water quality problem. The EPA's CSO policy was achieved by a consensus-building process very much like the one being undertaken for stormwater. No legislation, we believe, is really needed in this area, although codification of the CSO policy would certainly be acceptable to us. NRDC would disagree with AMSA about the need for "wet weather water quality standards." We believe this is an important scientific and technical issue, a question that is part of the EPA Wet Weather Advisory Group's analytical efforts, and legislation is not needed in this area at this time.

Clearly, we are going to need to continue to spend money to address the problems being discussed today. The NRDC and other environmental groups strongly support a continuing Federal contribution to the State Revolving Fund.

We do believe that privatization is not going to be a panacea and may bring with it regulatory complications that could increase the pressure to relax standards for water quality. Therefore, before Congress acts in this area, we would urge a far more in depth discussion of the potential pitfalls for water quality and for ratepayers of privatization.

The Clean Water Act itself is imperfect still today and there are several important areas where, if the law is reopened, we believe strengthening amendments should be made: first, national protections to ensure that our beaches are safe to swim in; second, a national program to ensure that fish are safe to eat for all consumers; and third, a mandate to EPA to tackle the problem of contaminated sediments.

The Clean Water Act overall is basically sound and what we really need most is adequate resources, both for the State Revolving Fund and for EPA to carry out its important role. We need additional congressional oversight to keep the program on track.

Thank you very much. My colleague and I would be happy to answer any questions.

Senator CHAFEE. Thank you very much, Ms. Landman.

Let me ask a question of Mayor Wennberg and the others may want to answer it too. What are we going to do? Here, apparently

15 percent of the water quality impairments come from stormwater runoff from urban areas and a large percentage of the lakes and streams and rivers close to or running through urban areas don't meet the water quality standards. So you've put up a pretty strong pitch against the stormwater requirements. What is your suggestion? What do we do?

Mayor WENNBERG. It's a pretty strong pitch against the stormwater requirements as they currently exist.

Senator CHAFEE. I must say, if it costs $650,000 for Rutland, VT, to try to come up with the material, and I understand maybe that's an average—averages are dangerous—but whatever it is, it's a substantial amount of money that doesn't get your waters any cleaner?

Mayor WENNBERG. Those numbers apply to the Phase I group which is cities over 100,000 and my community, being substantially less than that, hasn't been exposed to that yet, thanks to EPA's extension of a moratorium under dubious legal grounds.

To answer your question, I can answer your question initially by recalling Mr. Perciasepe's answer to a similar question you asked him, but only putting it on the other side of the coin. You asked him how he felt about the testimony I was about to give and he said we mustn't use what we don't know as an excuse to do nothing. We absolutely agree with that; we have no problem with that at all in the stormwater area.

What we're trying to say is that we should know what we're doing before we do it. Currently, that is simply not the case. We don't know what we're doing; we don't know how to do it; and we're in the process of spending vast sums of the taxpayers' and ratepayers' money for an undefinable, an unmeasurable benefit. I've laid out in the testimony a proposal, if you will, a five-point proposal for how we could redefine how the program works starting with good research to determine exactly the magnitude of the problem, going to good research to determine the real effect, the beneficial effects or lack thereof, of a variety of techniques that could be employed, best management practices, those kinds of things now being talked about so much, but we need to know what that does under different circumstances—climatological, hydrological, different kinds of urban environments. We need to develop the technologies that are going to be needed, the affordable technologies that are going to be needed to reliably and predictably remove contaminants from stormwater discharges, whether they be management practices or other technologies.

Then we need to adopt a new program, or we could do that in anticipation of these efforts which focuses the attention on those areas where the environmental harm is the greatest, the environmental risk is the greatest. Start where we are at greatest risk. It makes sense. Address the problem on a watershed basis. You mentioned the number I mentioned which is the 15 percent. Eighty percent comes from agricultural, mining and other types of forestry operations, those types of discharges.

It seems to me that if we looked at this—I believe most of the witnesses are in agreement on this—on a watershed basis and didn't exclude those issues, and carve out the municipal issues, the 15 percent, but include the 100 percent, not exclude us but include the others, and look at this on a watershed basis, I believe the expenditure and the effort the Federal and State governments would put in would yield far greater results.

Senator CHAFEE. I suppose there are probably more cows in your county than there are people or close to it. So you say, go where the problem is and where you're going to get the greatest return for your investment and you well know, for the Federal Government to try to get into watershed control is just getting us into a very contentious area where we have all kinds of problems. We tried to do something about the manure problems from the farms in your area coming into the streams, the fertilizer and so forth.

Mayor WENNBERG. It's a serious problem in Lake Champlain which is two States and two Nations that are involved in that, a major problem.

Senator CHAFEE. I must say, I was impressed by Mr. Pinault's testimony where I think you said it was going to cost 40 times as much to treat a gallon of stormwater than the municipal water, right?

Mr. PINAULT. That's correct in our case, Senator.

Senator CHAFEE. I see the problem. I don't get the solution though. That's why we asked you to come, Mayor Wennberg.

Mayor WENNBERG. I believe the solution awaits information and research and technologies or techniques that have yet to be developed or proven. That's what we're asking for, the opportunity to know what we're doing before we're required to do it.

Senator CHAFEE. I don't want to put you on the spot, but in the capital city of my State, Providence, in the old days, we used to see streetsweepers going around. I don't think I've seen a streetsweeper in Providence in years. I don't know whether streetsweepers are made anymore or maybe they are all broken or whatever it is. Do you have any streetsweepers in your city?

Mayor WENNBERG. Yes, Senator. We just bought one for $86,000. I know the price tag on them as a matter of fact because we just purchased a new one. That is one of the best management practices that is believed and can reasonably be expected to make a more frequent or regular streetsweeping—it is only logical that would have an impact on the quality of the receiving waters if we are able to collect those materials and dispose of them in an appropriate fashion rather than have them flushed into the receiving waters.

What we don't know with any degree of certainty, given the diversity around the country of climates, pollutants and so forth, is the degree to which that particular technique or any others will in fact make a difference in the receiving waters. Our basic bottom line should be that whatever we do in a stormwater or wet weather flows program should focus on the health of the receiving waters and not on end-of-pipe numbers. The continuing improvement of the waters of the United States should be the objective.

I know we just heard testimony that it is a red herring when we talk about end-of-pipe numbers but we have, on the record, testimony from the State regulators, the people who are writing these permits, that the next round of permits will contain end-of-pipe numerical limits. We don't know how to do it and we don't know anybody who knows how to do that. That's why this program needs to be fixed.

Senator CHAFEE. Because of the tremendous variety of substances that might be coming out that pipe?

Mayor WENNBERG. Because of the variety, because of the lack of control over their deposition, because of the unpredictability in most parts of this country as to how much of an accumulation there is before it's washed out, because of the differences in climates. Obviously a stormwater surge or wash in an urban area in Nevada is probably going to be much more of an environmental issue for the receiving waters than one that might happen in Vermont where they happen on a very frequent basis and in Nevada, it's on a very infrequent basis. So the quality and quantity of pollutants in those two situations is going to radically different. We don't have the information we need to design treatment or methods of dealing with those issues that address the differences between those wildly different circumstances. We really need to know what we're doing.

Senator CHAFEE. Ms. Landman, do you have a thought?

Ms. LANDMAN. We certainly would agree about the need to look at wet weather issues on a watershed basis and to take a more active and effective approach for addressing the other sources of contamination that do affect municipal waters, such as upstream problems from agriculture. We would encourage the other folks on the panel today to join us in urging for that to be a priority in any strengthening changes made to the Clean Water Act—enforceable mechanisms to attack those other types of pollution problems that don't come from municipalities.

I must say I do have some concerns about what is being said here today because really we do know—the best bang for the buck in terms of the cost of addressing the stormwater program problems, comes from prevention approaches—nonstructural approaches. Making intelligent zoning and site design decisions before you do new development can greatly reduce the flow of stormwater and its pollution.

The Phase II Program that we are working with many of my colleagues here on the panel today to develop, through the EPA negotiated process, is looking to a sensible targeted Phase II Program that uses approaches other than end-of-pipe treatment to deal with the stormwater problem. So when you talk about the cost of stormwater treatment, you should consider that the best approaches are ones that reduce the need for sending stormwater to a treatment facility. That is where we can really make some important headway.

We would agree that end-of-pipe effluent limits, numerical limits are not appropriate and should not be included in permits. We do not expect anybody to be trying to include them in permits in this cycle or the next cycle. However, one very serious concern is that we not retreat from our goals of meeting water quality standards in the receiving waters. The existing law is adequately flexible to allow municipalities and States to develop stormwater permits under Phase I and the Phase II Program, also. It's adequately flexible to develop approaches that achieve water quality goals without establishing numerical effluent limits. We should not retreat from the national water quality standards attainment goal in this Act through amendments to the law.

Senator CHAFEE. I certainly agree with your point about prevention.

Let me ask you folks, when you're going into new development and undeveloped land is converted into residential or commercial use and the bulldozing takes place and the whole hydrological system is upset, the drainage is disturbed, streams become scoured out by spring storms and they dry up in summer months and the filtering capacity of the environment is lost, the question is can we deal with this more effectively? Is there any city or community that is insisting that natural drainage patterns be maintained in the face of developmental pressures? Is anybody doing that? Is there a Federal role?

I must say, as you all know, any suggestion for the Federal Government to get into so-called land planning always sends up every kind of red flag and warning signal that we're exceeding our authority. Is any State doing a particularly good job that you know of, Ms. Landman?

Ms. LANDMAN. There are a number of States that have taken a more watershed-based approach to addressing stormwater problems pursuant to the 1987 amendments. A number of States have, for example, rather than only issue permits for the one legally covered component under the EPA regulations required to be covered by the permit, instead included other urbanized areas within that watershed in their overall program in an effort to go beyond the minimum requirements of the EPA rules to take a more sensible watershed-based approach. That is a sign of the type of thinking you're describing—to consider those urbanizing areas that surround the "doughnut hole," so to speak, that is required to be permitted.

There are many examples of communities around the country that are taking approaches that consider site design, for example. In fact, Montgomery County and Prince Georges County, MD, have done so.

Senator CHAFEE. Could you perhaps send us a list of those communities? You don't have to do it now but give it to the committee?

Ms. LANDMAN. Sure. There is one example, a 20-year-old example, presented in our testimony. Woodlands, TX, is a community that was developed with a site design deliberately intended to protect the natural hydrology and to prevent stormwater pollution, and it has turned out to be very cost effective. It has reduced the structural costs and has reduced stormwater management costs ever since then. The New York City watershed is another area.

Senator CHAFEE. That is an encouraging sign.

Mr. Marchetti, one question about the Revolving Loan Fund. Do you find instances where communities don't want to get into the Revolving Loan Fund because once they get into that, they are involved with Davis-Bacon, so the difference between the low cost of borrowing from you—you charge something, what interest rate do you have?

Mr. MARCHETTI. It varies.

Senator CHAFEE. Take not a hardship community?

Mr. MARCHETTI. We have, under our State legislation, various caps that we're constrained to charge depending on the unemployment in the county, but the lowest rate is 1 percent and we can go up to somewhere in the mid-4's.

Senator CHAFEE. So in any event, the attractiveness is the low interest rate?

Mr. MARCHETTI. Correct.

Senator CHAFEE. But with it, comes Davis-Bacon?

Mr. MARCHETTI. Right.

Senator CHAFEE. Do you find some communities say it's not worth it?

Mr. MARCHETTI. In our particular case, it's in a sense a nonissue because we have State requirements that are quite similar.

Senator CHAFEE. Similar to Davis-Bacon?

Mr. MARCHETTI. Right.

Senator CHAFEE. OK. Thank you all very much. Does anybody want to add anything? Yes?

Mayor WENNBERG. I just want to add one thing. As a member of the Urban Wet Weather Flow Committee, NLC endorses the CSO guidance that came out of a similar effort earlier and endorses that. It's in my written testimony. However, there is a significant difference between that committee and that discussion and the one going on concerning the urban wet weather flows, the difference being that the parameters that EPA set for that committee would let us figure out whatever it is we need to do to make this program work, including legislative changes, make those recommendations. In this negotiation, EPA has strictly prohibited consideration of the kinds of things you folks could do—changes in the law—and required the committee to only work within the limits of the existing legislative framework. I don't think that limitation is particularly constructive and will lead to the kind of positive results in this instance that we had under CSOs and would encourage you to listen to this testimony and take that into consideration when you see what comes out of that discussion.

Senator CHAFEE. Thank you very much.

The next panel will consist of Mr. Al Bilik and Mr. Dungan. Mr. Bilik, would you proceed, please?

STATEMENT OF AL BILIK, PRESIDENT, AFL–CIO PUBLIC EMPLOYEE DEPARTMENT

Mr. BILIK. Thank you very much, Mr. Chairman.

I'm Al Bilik, president of the AFL–CIO's Department of Public Employees. I want to thank you for this chance to be here today.

The Public Employee Department comprises 35 international unions representing 4.5 million public employees, including those who work as wastewater treatment workers.

Privatization is not a panacea. When President Bush issued his Executive order back in April 1992 urging States and local governments to privatize infrastructure, there were responses from various sources. The AFL–CIO issued a statement to place the 13 million member federation in strong opposition. I'll quote from that briefly:

> Privatization of public assets is a recipe for disaster at a time when the Nation's infrastructure is in a state of severe decline. It is proven bad policy for government to turn over public facilities to private operators who place a top priority on making money but not serving the public.

The Chicago Sun Times editorialized similarly:

> Don't rush to make public works private, it as a private contractor that drove the pilings that flooded downtown Chicago. Rushing into privatization before understanding everything involved is an overreaction.

That was generally the response from local governments and the States to the order that President Bush issued in 1992, that is, until the EPA began a crusade to encourage communities to sell off their water treatment facilities.

EPA has worked very hard for 3 years to conclude its first sale under the Bush order. Franklin, Ohio Regional Wastewater Treatment Plant was approved by both EPA and OMB for transfer to a waste management subsidiary, Wheelabrator, on July 11, 1995 for approximately $6 million. The transaction did not involve competitive bidding and the price was established by a technique known as the original cost less depreciation method. None of the proceeds was returned to the Federal Government; the entire payment was retained locally. The Bush order allows proceeds to be used by local governments to reduce taxes and debt at that local level.

The Wall Street Journal hailed the breakthrough on October 2, 1995, reporting that Wheelabrator and others are hoping for similar deals elsewhere. It's been established that there are more than $30 billion in wastewater treatment facilities currently in government hands.

The other companies referred to are two giant French firms, Compagnie Generale des Eaux and Lyonnaise des Eaux, the latter having earlier negotiated a management contract with the city of Indianapolis for the operation of its water treatment facility. Ironically, both French companies got their start after World War II with U.S. Government investment through the Marshall Plan.

Wilmington, DE, desperately trying to get out of debt, is being courted lavishly by the bidders at this moment. The London Economist taking note wrote "New York, Trenton, Orange County should be added to the list considering the strapped condition of those cities."

It's necessary to ask some questions. Was the Franklin deal truly based on fair market value? Was there formal appraisal and accounting? A recent report out of Great Britain reveals that the 1990 sale by the British Government of 12 regional electric utilities for $5 billion was, in fact, a steal for the companies that bought the properties. Euromoney for November 1995 estimates now that the value is actually $20 billion. J.P. Morgan in London has commented on this and has indicated it was sold much more cheaply than it should have been.

It's too late for the British but are we protecting ourselves against similar disasters? I would suggest a review by the General Accounting Office, and perhaps a look at this recent first effort at privatization of the Franklin, Ott, facility.

Will the Federal Government, which has contributed so heavily in the past to our infrastructure, be adequately compensated by any projected sales? The Franklin experience sends a clear signal that this may not be the case.

Another question is how will privatization affect our own environmental and worker standards? A recent illustration in which Lyonnaise des Eaux took over the Indianapolis plant is suggestive.

The company's bid was based on a reduction of approximately one-third of the staff and on a reduction of the city's high environmental standards. The Indianapolis Business Journal reported on February 7, 1994, that "The environmental groups claim that the effluent quality will drop from unusually pure levels to levels that barely meet environmental regulations."

As far as the employees are concerned, they are represented by one of our unions and receive wages and benefits comparable to those of other city workers.

In recent years, the United States has witnessed an unprecedented erosion of our physical infrastructure. We know about the crumbling situation everywhere in the country. We know about the wastewater problem. There is, in my opinion, no satisfactory substitute for direct public financing of infrastructure. In the 1980's while the United States was spending 1.6 percent of GDP on infrastructure, Germany was spending 4.7 percent and Japan, 6.3 percent. To equal Germany's investment would require that we now spend $175 billion annually. Privatization undermines the provision of quality services, threatens public employees, and could imperil the public safety. It raises serious questions about public accountability and oversight. Concerns are particularly grave when facilities dealing with life essential matters as water treatment, transportation, and prisons are involved.

Proponents of privatization are correct when they argue that public infrastructure needs massive investment. We're aware of that and much needs to be done. Specifically, in the event that a private firm cannot make a profit with a public facility, it may be forced into bankruptcy and under such circumstances, the government and ultimately the taxpayers will be held liable. We could end up with a situation much like the savings and loan debacle. When vital public services are at stake, the government is always ultimately liable for the health and well-being of its citizens whether or not it technically owns a facility.

Putting the infrastructure on the auction block will only serve to harm ordinary American businesses and communities by making facilities more expensive and perhaps less accessible. Low income households would be particularly harmed by ensuing higher user fees.

Although the privatizers say the facility should continue to be used for its original purpose, they don't specify who is to determine how long a facility will be needed for its original purpose. Once private facilities such as treatment plants could be converted to other uses whenever the new owners determine that they were no longer needed for their original purpose.

Another down side is that States and localities will be tempted to sell off assets as a quick fix to their financial troubles without addressing the underlying fiscal problems. After years of selling off assets to balance budgets, States and localities eventually could be faced with severe revenue shortfalls. Fiscal crises could ensue after the gimmicks have run their course.

Public employees and their unions have pleaded with public managers for years to face operating problems through partnership, working together to promote top quality service to the public. We continue to pledge our cooperation.

Finally, we believe the Federal Government should put a stop to any further efforts to privatize public facilities. We urge the President to rescind the Bush Executive order 12803 and to instruct the Federal departments to grant no waivers regarding Federal rights. This action would be more in the public interest than enacting any legislation that would expand and codify the Bush Executive order.

Thank you, Mr. Chairman.

Senator CHAFEE. Thank you very much, Mr. Bilik.

Now Mr. Dungan.

STATEMENT OF RONALD S. DUNGAN, SENIOR VICE PRESIDENT, UNITED WATER RESOURCES, AND PRESIDENT, NATIONAL ASSOCIATION OF WATER COMPANIES

Mr. DUNGAN. Good morning, Mr. Chairman.

My name is Ron Dungan. I'm president of the National Association of Water Companies. The NAWC is a trade association representing the Nation's investor-owned water utilities. Its 360 members and 41 States provide safe, reliable drinking water. Ten of our companies also provide wastewater service.

I'm also senior vice president for United Water Resources. United Water is the Nation's second largest investor-owned water utility serving more than 2 million people in 13 States and that includes Rhode Island and New Jersey. We also provide wastewater service to many of our customers. We are a partner in the entity that was selected to privatize the wastewater plants in Indianapolis, IN. This is the largest privatization contract of wastewater facilities in the United States and resulted in a savings to the city in the past year of almost $14 million or 42 percent as a result of the contract.

This has been a model project that demonstrates the benefits that can be achieved when private companies and cities work together. Positive relations with the local union, AFSCME, continues as union grievances have decreased from 38 under the last year with the city to 1 this past year.

Mr. Chairman, I applaud your leadership in holding this series of meeting on the Clean Water Act. My company and other NAWC members who own and operate wastewater treatment facilities are directly affected by the requirements of the Act. The experience of these companies demonstrates that the private sector can play a role in the provision of wastewater service and that role should continue to grow.

I'm not here today asking for any special incentives or special treatment for private companies. I'm here simply to talk about the current disincentives to privatization which hinder our industry and limit the options to local governments in dealing with their infrastructure.

EPA's 1992 needs survey estimates the Clean Water Act alone will cost Federal, State, and local governments $137 billion over the next 20 years. This is significantly greater than the funds available and is $57 billion more than the 1990 estimate. I recommend two changes to the Act that will facilitate the ability of the private sector to invest in wastewater treatment facilities.

First is a definition of publicly owned treatment works or POTW should be added to the Clean Water Act as in Senator Lautenberg's legislation, S. 1436. This legislation bases the definition of a POTW on purpose rather than ownership. The Safe Drinking Water Act clearly defines drinking water systems by purpose rather than ownership. This provides for uniform environmental regulation of a drinking water system whether owned by one of our member companies or a municipality.

In contrast, the Clean Water Act does not define a POTW. It does acknowledge the existence of privately owned water treatment in section 201(h) and EPA regulations have recognized a distinction. It is this distinction which unfairly and unnecessarily places investor-owned POTWs at a disadvantage. Why should different regulations exist for effluent quality and sludge depending upon ownership?

S. 1436 will provide uniform regulations for all such facilities. This, in turn, will provide local governments the flexibility to make arrangements for the provision of wastewater services that meet local needs. The U.S. Conference of Mayors is strongly opposed to regulations which restrict their ability to solve the major infrastructure problems.

Second, the Clean Water Act should be modified to encourage the establishment of public-private partnerships to construct and manage treatment works. Under current law, SRF funds are only available for treatment works which are publicly owned. Modifying this section to permit SRF moneys to be used in investor-owned facilities and in conjunction with private funds could leverage additional moneys which would help close the funding gap described above and free up more funds for more important programs. Also, S. 1316, the Safe Drinking Water Act Amendments of 1995 which have just recently passed both this committee and the full Senate unanimously endorse the authorization of drinking water funds for private companies.

The changes described above will help produce a more effective and efficient Clean Water Act. This will hasten the achievement of its worthy goals, fishable and swimmable waters.

We appreciate this opportunity to provide testimony on the Clean Water Act and look forward to working with you on these issues during reauthorization. Please feel free to contact NAWC if you require any additional information on these items.

I would also say that I have some summary information from the Mayor of Indianapolis and his report on the first year of activities under the contract that I think you would find interesting if you'd care to hear those.

Senator CHAFEE. Thank you, Mr. Dungan. That report of the Mayor, what is that in the form of? Is it an annual report? In other words, yes, I think we would be interested in hearing what the Mayor said.

Mr. DUNGAN. Would you like some of the high points at this time?

Senator CHAFEE. Briefly, yes, and also if we could get a copy of that.

Mr. DUNGAN. We will submit that to you. Let me just give you a couple of things because I think this particular contract demonstrates not only working with a city but very much with the union.

As I mentioned before, the grievances decreased from 38 to 1; employee accidents are down 70 percent; lost time due to injury is down 87 percent; sick time for employees down 50 percent. The effluent quality, contrary to what was previously said, per the contract cannot decrease from what the city had. We are mandated to be equal to or better than that. The laboratory received a State excellence award. The wastewater operators team won the State competition.

Last, the union is now part of a contract proposal which we're making to the city for a separate contract to cover their collection system and the union is officially a part of our proposal. So I think it's a win-win-win situation.

Senator CHAFEE. Thank you.

Mr. Bilik, I couldn't quite understand the problems that you suggested would take place. For example, we have privately owned electrical companies, we have privately owned telephone companies, we have privately owned hospitals and airlines. For instance, in my State there is no municipally owned hospital anymore. When I was Governor, we closed the last municipal hospital owned by the city of Providence.

Mr. BILIK. That's a tragedy.

Senator CHAFEE. Well, no, it wasn't a tragedy because it wasn't run very efficiently.

I think many of us have a belief that private enterprise is where you get attempts to serve the public. In other words, one of the points was that you started off by saying it's a bad policy to turn public facilities to private operators who place a top priority on making money, not serving the public. Yet, every private business has to serve the public or the public won't come back. I suppose you could say that is a different situation, that's competition where you only have one waste treatment plant in a community.

Mr. BILIK. The savings and loan organizations were private and served the public I assume, badly. There is no absolute definition except that companies that enter into private enterprise do so for the major, if not sole purpose, of making money for their investors. It's perfectly understandable.

By the same token, there are, in my view, and I must admit to a basic prejudice, there are certain aspects of public life, certain aspects of our economic life, if you will, that intertwine directly and intimately with the public need. I class those public hospitals that are no longer in existence in some places as being in that category. For whatever the reason, whether it be the public service is of general value to the entire community or as developments occur is of specific value to certain elements in the community, particularly those who are low income and who are not able to easily enter into the general economic competition, whatever the reasons, a democracy like ours requires certain basic elements of public services.

I think that not only the health of the people needs our involvement but there are certain general aspects like transportation where we must have a public investment; we need it in protecting our water facilities. I wouldn't leave the question of quality of water to private enterprise for the market to determine what levels should be achieved.

Senator CHAFEE. I don't think anybody would suggest that in any of these programs you'd just be leaving it to private enterprise. For example, in the Safe Drinking Water, there are a whole series of requirements on the policing of the various contaminants, regulations and so forth.

Mr. BILIK. Let me add quickly if public regulation is implied, that is what you're describing and I assume that too, then it begs the basic question. If an enterprise is being conducted publicly now, done by public employees with public managers, wouldn't we be wiser to look more deeply into those enterprises to determine how better to deliver those services instead of simply assuming that private operation is more efficient as the Bush Executive Order did? It ipso facto said, private enterprise is more competent than public enterprise, which we know is not true.

In our case, in our unions, we're saying to the public managers, we have a quality problem, a delivery of services; we wish you would join with us in a partnership and attack those problems within the context of the public service and not take the easy path of selling off to the highest or sometimes not the highest bidder.

Senator CHAFEE. Mr. Dungan, I was very interested in what you had to say. I must say this is an area with which I'm not deeply familiar. I know Senator Lautenberg has spent time on this and I think there is something appealing about the idea of a level playing field. In other words, if the communities want to do it, that's their business; it's not for us to dictate through restraints or restrictions which would prohibit a local community, Indianapolis or whoever it is, that wants to privatize its waste treatment plants. So I will be interested in that report from the Mayor. Is it a report?

Mr. DUNGAN. Yes, it's a report that he made to the council and we'll make that available.

Senator CHAFEE. OK.

Senator Lautenberg.

Senator LAUTENBERG. One of the things, Mr. Bilik, that I think we have to do is to make sure that we're all developing the same high quality standard necessary to satisfy the objective. I think Mr. Dungan said that in his comments. We don't want municipalities, regional authorities, et cetera giving away the store. That, I think, we have to guard against because these are public assets that are being traded.

On the other hand, I think if we have appropriate standards for performance, delivery of product, that we can find a way out of a terrible dilemma we're facing. It's in the paper every day. It's how do we finance the needs of this society of ours without constantly going to the taxpayer with whom there is little if any recourse save every couple of years an election, and find the funds necessary to get this job done.

This job has become so incredibly large because of neglect or ignorance, if you will, of what problems were being created over a number of years. There are still people asking the question, why should I have to pay for something that didn't violate the law over the years and we fall back to common law that says you're responsible for your share of the public well-being and thusly, if you did it, you're responsible for it.

So we needed, as a result of that, enormous sums of money to deal with these problems. Frankly, I do think there is a place for the private sector in a lot of these facilities provided we treat—you know from my record I'm very conscious of the working person's need for security and safety and a decent wage. That kind of goes without saying as I talk about some of the privatization efforts that I've been involved with or government corporations. I try to protect the employee's longevity and interest but also to take care of the public they are serving.

If we rely strictly on the public sector to pay for these programs, we are just not going to find the money to do it. It's too removed from the public as a solution to their problem. You talk about clean air. Everybody wants clean air. When they find out it costs something, they are not quite as sure, or clean water, because we fail to make that message a very clear one.

I say this, if we're going to do privatization and it is imminent, there is no turning back, we ought to make sure the values are proper, that the asset is sold for, make sure the conditions under which these companies are going to operate are very clear, what are the standards and then the companies make the decision.

I don't know where your operations are in New Jersey Mr. Dungan, what town?

Mr. DUNGAN. United Water Resources is headquartered in northern New Jersey, in the Bergen County, Hackensack area, serving well over 300,000 customers, a million people in New Jersey.

Senator LAUTENBERG. Mr. Bilik, you've looked at my legislation and you don't see any problem with that in terms of the finding or determining what it is that is the standard for companies to operate with, be they private or public?

Mr. BILIK. No question, there is a necessity for standards. We have a whole history of public utilities with private involvement and certainly private investment. There is nothing new about that. Bond issues are submitted regularly and so on and they are bought by private enterprise.

The difference here, of course, is that the private folks who normally invest are not satisfied with just investing; they want to run it; they want to control it; and they want to be able to determine a profit, not just that of investing, but out of the operation itself. It's that element that I think we have to be extraordinarily careful of.

For example, in the Franklin, OH, illustration, to my knowledge, there was no bidding that was done. Normally, when you think about selling off, you take bids. That's axiomatic in all public enterprise or public management. In this case, there was none. I don't know why. I'm sure there is an explanation somewhere, but it seems to me we want to be very careful not to allow a single firm to make its entry into an area and using whatever techniques it may use, to finally wind up with the contract. Perhaps you'll want to ask somebody about that.

I'd like to dwell for a moment on the basic question. The need for investment, nobody argues that we need that; I mentioned it in my statement, we're so far behind other countries. We ought to be a little more enterprising, a little more imaginative about how we take advantage of the enormous resources of this, still the wealthiest country in the world still.

For example, we represent millions of public employees. They are members of public employee pension plans. In many cases, we have equal voice with the employer in how to administer, including how to invest, those pension funds. We are on record as urging the consideration by the Congress of some proposal for infrastructure banks. Take it away from private enterprise in this sense and establish a banking system that would dwell on the problems of infrastructure, would raise money by appealing, not mandatorily, but by appealing to pension systems.

We have over $1 trillion in our State and local government pension plans. We're not there to give it away, but we are there to make intelligent investment. We know what an intelligent investment is. It's in the infrastructure, especially where we live and work. It redounds to the benefit of all of us.

We're available for that and I would encourage the Senate and the House and well-meaning members to think in terms of imaginative programs that will call on institutions in the United States, not just the private operators who are out to make a buck. There's nothing wrong with that; but I'm talking about tapping funds that are available and where we could work out a plan—it's not unique, it's not novel. Felix Rohatyn has talked about it as others have, and it ought to be seriously considered. I'm saying to you that our pension plans, made up of members of our unions, are interested—they are not going to give it away—but they are interested in a system which will utilize their funds intelligently.

Senator LAUTENBERG. We could have a good time talking about this. Unfortunately, time doesn't allow but I will say this to you in quick response. One of the most significant concerns of working people today, typically the union member, is the sanctity of their pensions.

Mr. BILIK. Absolutely.

Senator LAUTENBERG. I'll tell you, a lot of people have their eyes on that horde, if I can call it that, because it's so large. But there is a debate about whether the growth, whether profits, et cetera in those funds ought to be available to be used for other things. So you'd have to explain it to your union members. I wouldn't want to have to tell them that they are going to be limited to a very modest return on their investment because it's going to go into lending, it's going to go into bonds as opposed to the opportunity to have it grow consistent with the growth in the economy or growth in equity in investments.

Mr. BILIK. That's right. We will take chances on that.

Senator LAUTENBERG. To say to those people, well, we're going to choose investments and if a town or city can't afford it and they need, because of the income level in the community, lower and lower rates, rates that don't equal the need to continue to reinvest in the system, leave it to us, we're going to make good judgment, I'd like to see you answer to the group of employees that are going to have the questions.

I want to ask Mr. Dungan a question. I think you get the sense that Mr. Bilik is in favor of privatization?

Mr. DUNGAN. I sense that, yes.

Senator LAUTENBERG. How do you feel about some of the comments that he's made and using fairly reliable resources for information, whether it's The Economist or other publications, in terms of the "give away" kinds of things, what happens with turning over the asset to a private sector company?

Mr. DUNGAN. Let me start by saying that I'm not here to say that I think private enterprise should do everything. I think it's one of the pieces of the puzzle. The piece that we talk about as we encourage a level playing field is that the United States makes good, economic decisions. We do things most efficiently, we have more challenges and resources and we need to do things in the best way. So I think there's a lot of municipalities that do excellent work out there that should not go to a private company. There's other places where use of a private company would be beneficial.

The one thing to keep in mind, the places where we have an outright sale of assets in many States that is going to fall under the regulation of the public utility commission because it will become a regulated utility. So the customers, as you were, will be protected there.

Where there is a partial investment or where it's contract operations, I think what he is saying can be true in certain instances, but I think we have to look at it properly. As has been mentioned, the electric companies are basically investor-owned throughout the United States. We are here to continue in business. We have the contract, we're part of it in Indianapolis. We hope that's the first of many and the only way that is going to happen is if we have the reference of the city, of the people who live in the community, and also of our workers. To date, we can say we have all of that. I think that is the thing that is important, that we are not going to sacrifice and do shoddy work or not meet regulations. We want to do better than what was done before and I think that's the motivation.

A lot of municipal employees and a lot of private cities out there have that same motivation, but in other places, private enterprise can come in and do a very commendable job in improvement, saving a lot of resources which can be put to good use to solve our other problems.

Senator LAUTENBERG. The critical factor—I heard you say it in your testimony and I just want to emphasize it—is the fact that the standard for operating the same, universal, be they private or public-owned facilities.

Mr. DUNGAN. When we have a contract in Indianapolis, we are taking an awful lot of risk. We are not guaranteed any profit but we are obligated to meet certain standards. In this case, it's to meet or exceed what the city was doing and do all these other improvements. We are doing that knowingly and if we don't do it, we'll be sued. So we will do it and we are committed to it.

Senator LAUTENBERG. Thank you, Mr. Chairman. Thank you, gentlemen.

Senator CHAFEE. Just a quick question, Mr. Dungan. It seems to me that it's quite a risky proposition for your equity investors, your company, to buy—what do you do, you buy the plant? It seems to me there are two ways of doing it. One is to buy the plant and then operate it; another is to just take a management contract and not be stuck with all that capital investment. What have you done in Indianapolis?

Mr. DUNGAN. In Indianapolis, we do not own the assets; we're just operating the facilities for them and capital expenditures are basically being funded by the city with them approving the projects. There may be situations where we agree to do some of the funding. In what we call privatization, in broad terms, it goes from the one extreme being just doing partial operations to the full extreme of owning the assets. Any combination along that line can be done depending upon what the community wants and what best suits their needs.

Senator CHAFEE. But if you purchased the plant, then the rate structure—if you're running a furniture store, you can determine what you're going to charge, but if you purchase one of these plants, what is it, the public utility commission or someone says what you can charge?

Mr. DUNGAN. Under public utility law, if we were to buy the collection system and everything else, we would certainly be under the public utility commission of the State. This is relatively uniform throughout the United States. It's based on an original cost basis of the investment. You're permitted a return on your invested capital and you're permitted to be reimbursed for expenses the Commission thinks are qualified expenses. So it is all regulated. The quality of service is regulated. They do not need to permit you to increase your rates; you cannot increase rates without their approval, so the consumers are well-protected in that type of environment.

Senator CHAFEE. But if you're just operating under an operating contract, your only savings there are primarily with how you handle your personnel, running in a more efficient manner and pay attention to overtime, so forth and so on, I presume?

Mr. DUNGAN. The largest factor is labor and in this situation and many others, we find we can be substantially lower in operating costs for power and other things through efficiencies, through computerized systems centralized warehousing, fleet maintenance and other things which have significantly reduced costs in Indianapolis. So it's a compendium of looking at it to say how can we be more efficient. The challenge is on private enterprise in this contract to be efficient.

Senator CHAFEE. How long would a typical contract be?

Mr. DUNGAN. The law with the IRS interpretation right now, the most that it can be, including the extensions, is 5 years.

Senator CHAFEE. So what about Mr. Bilik's suggestion—he didn't specifically say this but I gathered that suppose during that time you milk the thing, you didn't do the maintenance and then you get out at the end of 5 years?

Mr. DUNGAN. I wouldn't last 5 years; I'd be in default of the contract and I'm very sure the mayor and the city council would haul us up there because they have to answer to the public, they wouldn't tolerate us not complying with the contract.

Senator CHAFEE. I'm not suggesting this would occur necessarily, but you could, with some band-aid, get through the 5 years, meeting your requirements and it would take an expert to go in there and say you're not doing proper maintenance.

Mr. DUNGAN. I think you're right, you could do some of those things. I think the thing you have to keep as a central principle that most companies like the companies we represent, are in business for the long term. We're not here for the one contract. We frankly wouldn't wreck our reputation to make an extra buck in Indianapolis. We'd rather lose money in Indianapolis to preserve our reputation if that's what it took. I think what's happened out there. With private enterprise, there are examples who have misused the public trust but those that have intentions of staying in business for the long haul know that it's only done by the reputation and their ability to serve.

Senator LAUTENBERG. Can I ask a quick question? The Indianapolis contract you talked about, how does that square with Mr. Bilik's reference to Lyonnaise de Eaux, the management of the treatment plant?

Mr. DUNGAN. They are a partial owner; they have a 5 percent direct interest.

Senator LAUTENBERG. I see. Were they the principal bidder?

Mr. DUNGAN. No. They were part of a group that was the bidder. It was a partnership which included the local water company there, the Indianapolis Water Company, and our contract operations company that we own part of.

Senator LAUTENBERG. And Mr. Bilik's comment that the reduction of the city's high environmental standards to the lowest EPA levels is allowable. Are you familiar with that accusation?

Mr. DUNGAN. When I read his testimony, I was and heard it, but that is not true. By contract, we're obligated to maintain at least that standard or increase it, and we have done that.

Senator LAUTENBERG. I would ask each of you to submit for the record, Mr. Chairman, the claims that you make and your response to that claim.

Mr. DUNGAN. I'd be glad to.

Senator CHAFEE. All right, fine. Thank you all very much.

That concludes our hearing. Thank you.

[Whereupon, at 12:30 p.m., the committee was adjourned, to reconvene at the call of the Chair.]

II

104TH CONGRESS
1ST SESSION

S. 1390

To amend the Federal Water Pollution Control Act to permit a private person against whom a civil or administrative penalty is assessed to use the amount of the penalty to fund a community environmental project, and for other purposes.

IN THE SENATE OF THE UNITED STATES

NOVEMBER 3, 1995

Mr. PRESSLER introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

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A BILL

To amend the Federal Water Pollution Control Act to permit a private person against whom a civil or administrative penalty is assessed to use the amount of the penalty to fund a community environmental project, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "Local Environmental Improvement Facilitation Act".

SEC. 2. USE OF FEDERAL WATER POLLUTION CONTROL ACT CIVIL PENALTIES TO FUND COMMUNITY ENVIRONMENTAL PROJECTS.

Section 309 of the Federal Water Pollution Control Act (33 U.S.C. 1319) is amended by adding at the end the following:

"(h) USE OF CIVIL PENALTIES TO FUND COMMUNITY ENVIRONMENTAL PROJECTS.—

"(1) ELECTION.—Notwithstanding any other provision of this Act or any other law, in the case of a civil or administrative penalty assessed against an individual, corporation, partnership, or association (referred to in this subsection as a 'private person') under this Act, the private person may elect to—

"(A) pay the amount of the penalty to the Treasury of the United States for deposit into the special account described in section 3113(d) of title 31, United States Code, for payment of public debt obligations; or

"(B)(i) pay an amount not to exceed $500,000 of the penalty to carry out a community environmental project through an agreement entered into in accordance with paragraph (2); and "(ii) pay the remaining amount of the penalty in accordance with subparagraph (A).

"(2) AGREEMENTS TO CARRY OUT COMMUNITY ENVIRONMENTAL PROJECTS.—

"(A) IN GENERAL.—If a private person makes the election described in paragraph (1)(B), the private person, after consultation with and obtaining the concurrence of the State and each political subdivision of the State within the jurisdiction of which the violation that resulted in the penalty occurred, shall enter into an agreement with the parties described in subparagraph (B) to pay the amount described in paragraph (1)(B)(i) to an appropriate person in order that the person may carry out 1 or more environmental projects described in subparagraph (C). A separate agreement shall be entered into with respect to each penalty for which an election is made as described in paragraph (1)(B).

"(B) PARTIES.—The parties to an agreement referred to in subparagraph (A) shall be the private person, the Administrator, and each person that is to carry out the environmental project.

"(C) ENVIRONMENTAL PROJECTS.—An environmental project referred to in subparagraph (A)—

"(i) shall be described in the agreement, which description shall include the type and scope of the project and the time period in which the project is to be carried out;

"(ii) shall be carried out within a city or county in which the violation occurred;

"(iii) shall bear a relationship to the nature of the violation;

"(iv) may not be inconsistent with any Federal or State law;

"(v) may not duplicate an activity or project for which Congress has specifically appropriated funds; and

"(vi) may not consist of—

"(I) a monetary contribution to environmental research conducted at a college or university;

"(II) a study or assessment (including a pollution prevention assessment, a site assessment, an environmental management system audit, or a compliance audit) without a commitment by a party to the agreement or by another person or Federal entity to implement the results of the study or assessment; or

"(III) a project that is being funded through a low-interest Federal loan, a Federal contract, or a Federal grant.

"(D) OVERSIGHT.—

"(i) IN GENERAL.—The Administrator shall ensure that an environmental project that is the subject of an agreement entered into under this subsection is carried out in accordance with the terms of the agreement.

"(ii) ENFORCEMENT.—If the Administrator determines that a private person that elected under paragraph (1)(B) to enter into an agreement fails to carry out the environmental project in accordance with the agreement, the Administrator may terminate the agreement and require the private person to pay all or part of the penalty amount described in paragraph

(1)(B)(i) as if no election had been made.”.

II

104TH CONGRESS
1ST SESSION

S. 1391

To amend the Federal Water Pollution Control Act to prohibit the imposition of any civil or administrative penalty against a unit of local government for a violation of the Act when a compliance plan with respect to the violation is in effect, and for other purposes.

IN THE SENATE OF THE UNITED STATES

NOVEMBER 3, 1995

Mr. PRESSLER (for himself and Mr. CAMPBELL) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

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A BILL

To amend the Federal Water Pollution Control Act to prohibit the imposition of any civil or administrative penalty against a unit of local government for a violation of the Act when a compliance plan with respect to the violation is in effect, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. WAIVER OF PENALTIES WHEN FEDERAL WATER POLLUTION CONTROL ACT COMPLIANCE PLANS ARE IN EFFECT.

Section 309 of the Federal Water Pollution Control Act (33 U.S.C. 1319) is amended by adding at the end the following:

"(h) WAIVER OF PENALTIES WHEN COMPLIANCE PLANS ARE IN EFFECT.—

"(1) IN GENERAL.—Except as provided in paragraph (2), notwithstanding any other provision of this Act, no civil or administrative penalty may be imposed under this Act against a unit of local government for a violation of a provision of this Act (including a violation of a condition of a permit issued under this Act)—

"(A) if the unit of local government has entered into an agreement with the Administrator, the Secretary of the Army (in the case of a violation of section 404), or the State to carry out a compliance plan with respect to a prior violation of the provision by the unit of local government; and

"(B) during the period—

"(i) beginning on the date on which the unit of local government and the Administrator, the Secretary of the Army (in the case of a violation of section 404), or the State enter into the agreement; and

"(ii) ending on the date on which the unit of local government is required to be in compliance with the provision under the plan.

"(2) REQUIREMENT OF GOOD FAITH.—Paragraph (1) shall not apply during any period in which the Administrator, the Secretary of the Army (in the case of a violation of section 404), or the State determines that the unit of local government is not carrying out the compliance plan in good faith.

"(3) OTHER ENFORCEMENT.—A waiver of penalties provided under paragraph (1) shall not apply with respect to a violation of any provision of this Act other than the provision that is the subject of the agreement described in paragraph (1)(A).".

PREPARED STATEMENT OF HON. LARRY PRESSLER, U.S. SENATOR FROM THE STATE OF SOUTH DAKOTA

Mr. Chairman, I am pleased to be invited here today to express my views on potential revisions to the Clean Water Act.

As you may know, earlier this year, I introduced two bills to bring some degree of fairness for municipalities to the Clean Water Act. S. 1391 would lift the unfair burden of excessive regulatory penalties from the backs of local governments that are working in good faith to comply with the Clean Water Act. S. 1390 would allow companies that violate the Clean Water Act the option to invest fines in improving their local environment. Mr. Chairman, both of these bills make good sense.

Under current law, civil penalties of up to $25,000 per day begin to accumulate the moment a local government violates the Clean Water Act. Once this happens, the law requires that the local government present a Municipal Compliance Plan for approval by the Administrator of the Environmental Protection Agency (EPA), or the Secretary of the Army in cases of section 404 violations. However, even after a compliance plan has been approved, penalties can continue to accumulate. In effect, existing law gives the EPA the authority to continue punishing local governments at the same time they are trying to comply with the law. There is something not right with this.

Mr. Chairman, virtually no city in South Dakota can afford such steep penalties.

When I talk with South Dakotans, few topics raise their blood pressure faster than their frustrating dealings with the Federal bureaucracy. Government is supposed to work for us, not against us. Mr. Chairman, this is clearly a case where Federal law works against those cities and towns trying in good faith to comply with the Clean Water Act.

S. 1391 would offer relief to small and large cities alike. Under my bill, local governments would stop accumulating civil and administrative penalties once a Municipal Compliance Plan has been negotiated and the locality is acting in good faith to carry out the plan. Further, my bill would be an incentive for governments to move quickly toward achieving compliance with the Clean Water Act.

S. 1391 is designed simply to address an issue of fairness. Local governments must operate with a limited pool of resources. Localities should not be forced to devote their tax revenues both to penalties and programs designed to comply with the law. It defies common sense for the EPA to penalize a local government at the same time it is working in good faith to comply with the law. My legislation restores common sense and fairness to local governments. By eliminating unfair penalties, local governments could better concentrate their resources to meet the intent of the law in protecting our water resources from pollution.

The second bill I have introduced would empower community investment in the environment. Under S. 1390, Clean Water Act fines could be invested in the community where the violation occurred, rather than sent to Washington.

In May 1995, the Environmental Protection Agency began a new program to encourage local environmental projects through EPA fines. S. 1390 would adopt as law the goals of this program—to give Clean Water Act violators the option to perform community services by targeting their fines to local pollution prevention and remediation activities.

Under my legislation, companies found guilty of violating the Clean Water Act would be given the option of contributing to a community environmental project in lieu of paying fines directly to the Treasury. Violators could negotiate with State and local officials to determine an appropriate project. The money would then be paid by the violator directly to cover project costs.

The benefits to this legislation are clear. Passage of this bill would express Congress' support for local environmental projects. In addition, this legislation represents community empowerment. It gives the local community the opportunity to right a wrong done to its citizens by one of its own. It is common sense. Clean Water Act violations inadvertently can punish the community where the violation occurred. It's only fair that when a violator is punished, the community should receive some compensation in the form of community service. This option certainly is preferable to sending penalty dollars back to Washington to pay for more bureaucracy.

Mr. Chairman, I again thank you for inviting me here to testify on ways to improve the Clean Water Act. I have offered two examples of how we can make the Clean Water Act work to benefit people at the local level. I look forward to working with the members of this Committee to pass these bills as part of our efforts to enact comprehensive Clean Water Act reform.

PREPARED STATEMENT OF ROBERT W. PERCIASEPE, ASSISTANT ADMINISTRATOR FOR WATER, U.S. ENVIRONMENTAL PROTECTION AGENCY

Good morning, Mr. Chairman, ladies and gentlemen. I am Robert Perciasepe, Assistant Administrator for Water at the Environmental Protection Agency (EPA). I am very pleased to appear before the Committee today to review the progress we are making in control of water pollution from the Nation's major urban areas and other municipalities.

We have made dramatic progress over the past 25 years in the control of sewage discharges from cities and towns across the country. Under the Clean Water Act alone, local communities, States, and the Federal Government have invested over $80 billion in sewage treatment facilities. These facilities now remove millions of tons of pollutants from municipal wastewater annually and have made routine discharge of raw or under-treated sewage increasingly rare. Levels of biological oxygen demand from sewage discharged have declined from 6,764 metric tons per day in 1972 to 4, 347 metric tons per day in 1988, at the same time that the population served by treatment facilities has increased from 80 million in 1972 to 144 million in 1988. Over 100,000 tons of toxic metals and organic pollutants are removed each year by controls of industrial discharges to sewage treatment plants.

The remarkable progress in treatment of sewage is one of the major success stories of the country's environmental protection efforts. This progress was accomplished by a strong Federal-State partnership in administering a variety of programs, including the requirement for national, minimum performance standards for treatment of sewage (*i.e.*, secondary treatment) supplemented with additional treatment where needed to meet State water quality standards.

Unfortunately, despite the hard work of all of us, sewage discharges and polluted runoff from urban areas continue to cause serious water pollution problems throughout the country.

Municipal discharges of sewage are the leading water pollution problem in the Nation's coastal waters, contributing to the impairment of 53 percent of the coastal waters assessed by the States in 1992. Discharges from urban storm sewers and urban runoff were the second leading cause of coastal pollution, contributing to the impairment of 43 percent of assessed waters.

While pollution from agricultural activities is the leading cause of pollution to the Nation's rivers, sewage discharges rank second and storm sewers/urban runoff rank third.

In the case of lakes, storm sewers/urban runoff impair 24 percent of assessed waters, while sewage discharges impair 21 percent of these waters and subsurface sewage disposal impairs 16 percent.

Some of these impairments result from lack of sufficient treatment of sewage. In addition, in over 1,000 communities, raw sewage overflows from combined storm and sanitary sewers causing very serious pollution problems and posing a threat to public health.

Sewage discharges and related pollution from urban areas have serious environmental, health, and economic consequences.

Sewage discharges are a major cause of beach closings. The number of coastal beach closings has increased over the past several years, from 484 in 1988 to 2,279 in 1994. Although the number of beaches monitored has increased and beaches sometimes are closed for reasons other than pollution, this sharp increase in reported closings is cause for concern. The States of New York and New Jersey lost billions of dollars due to reduced economic activity during beach closings over two recent summers.

We have made some progress in opening of shellfishing areas, but one third of shellfishing areas remain "harvest limited" and sewage and related discharges are a major cause of these limitations. Shellfish area closures have serious impacts on local economies.

Urban areas throughout the country can testify to the economic benefits that come from waterfront revitalization that is only possible when waters are clean. The city of Baltimore, where I was in local government, has the now famous Inner Harbor. The quality of the Potomac River here in the Nation's capitol has improved dramatically. Cleveland, Ohio, and the Cuyahoga River were once symbols of the cost of degrading our water resources. Today, the Cleveland harbors are bustling with pleasure boats and seven million people visit the waterfront each year.

Mr. Chairman, I hope that my testimony today will convince you and other members of the Committee that, although the water pollution problems caused by municipalities are serious and challenging, the Clean Water Act now provides us with tools and programs that form a strong foundation for solving these problems. Any changes to improve the Clean Water Act in these areas should build on this foundation, rather than replace it.

- We have a well-managed program to capitalize State loan funds that assist communities in financing of sewage treatment and related projects.
- We have an effective "pretreatment" program for control of industrial discharges to sewage treatment plants.
- We are implementing a flexible and innovative program for control of municipal stormwater discharges.
- We are implementing a consensus policy for the long-term control of overflows of raw sewage from combined sewers, and are developing policy for control of sanitary sewer overflows.
- We have the authority we need to adapt our basic permit program to address disposal of sewage sludge and discharges of municipal wastewater into marine and estuarine waters.

While any of the legislative provisions authorizing these programs might be improved in some minor ways, the basic authority and legislation is sound.

Perhaps more importantly, I want to convince you that EPA is implementing the existing legislative authority in a responsible, sensible manner.

- We recognize the serious financial constraints that many cities and towns face today.
- We appreciate that, because of the physical and financial magnitude of the job, solving many municipal water pollution problems will take many years.
- We have demonstrated a commitment to developing flexible and innovative solutions, and tailoring solutions to unique discharges, such as sewage discharges from the city of San Diego.
- We understand how important it is to maintain good communication with municipal officials that have direct responsibility for implementing water pollution control programs.
- We are reinventing and streamlining key elements of the program by developing new measures of effectiveness that focus on environmental, rather than administrative, measures, reducing reporting and monitoring when facilities show good performance, promoting the use of voluntary environmental management systems, and simplifying the process for obtaining discharge permits.

I would like to more fully describe the approach we are taking to municipal water pollution control problems. I will address three major topics in the remainder of my testimony. First, I will review the operation of the State revolving loan funds. With additional capitalization along the lines recommended by the administration, States should soon be able to generate $2 billion in annual loan activity for many years to come. Second, I want to describe our efforts to streamline and improve controls over urban wet weather sources, including our commitment to assuring the involvement of municipal officials and other interested parties. Finally, I will review the status of other activities that are essential to the balanced and effective control of municipal pollution, including the sewage sludge program, the pretreatment program, and initiatives to streamline pollution control programs.

STATE REVOLVING LOAN FUNDS

Funding for water infrastructure is one of the most powerful contributions that the Federal Government has made to honoring its commitment to protection of our Nation's waters.

The 1987 amendments to the Clean Water Act provided for the phase-out of the sewage treatment construction grant program and the establishment of Federal grants to States to capitalize new, State revolving loan funds (SRFs). These loan funds provide low interest loans to help communities finance construction of sewage treatment facilities. Because of the revolving nature of the SRFs, and the potential for leveraged financing, an initial investment by the Federal and State governments can result in construction of up to four times as many pollution control projects over a 20-year period as could be constructed with traditional Federal grants. To date, we have provided over $11 billion to capitalize these State funds and over 3,300 loans have been made by the SRFs. The efficiencies provided by the SRF program are essential if we are to make steady progress toward addressing the long-term needs for sewage treatment and related facilities, estimated to be over $100 billion.

We have three major goals for the SRF program:

- continue to provide capitalization grants for several more years at levels that will enable States to provide at least $2 billion in loans each year over the long term for sewage treatment and related projects;

- improve coordination between SRF programs and State efforts to manage water quality on a watershed basis and address problems associated with nonpoint sources of pollution; and
- help small, disadvantaged communities better afford the costs of wastewater treatment through more advantageous loan terms.

Although enactment of amendments to the Clean Water Act could facilitate progress toward each of these goals, we will be able to continue to operate an effective SRF program in the years to come without enactment of such legislation.

SRF Capitalization Grants

First, and most important, the administration has made the continuation of adequate capitalization of SRFs a high priority. Our goal is to provide sufficient capitalization funds so that States can generate at least $2 billion per year in average annual SRF wastewater loan activity well into the next century.

Meeting this goal will require that loan repayments from past loans be supplemented with continued Federal capitalization grants. The President requested $1.59 billion in fiscal year 1996 to support the SRF program. Although the authorizations for the SRF program provided in the 1987 Clean Water Act amendments have expired, the appropriations bill approved by the conference committee provides $1.125 billion for wastewater capitalization grants.

We all recognize that there are likely to be significant budget constraints in the years to come. Given this difficult budget environment, it would be helpful for the Congress to enact new authorizations for the SRF program that support the minimum goal of $2 billion in loans per year.

Details of the 7-year balanced budget negotiations are still being determined, but authorization levels of $1.3 billion for fiscal year 1997 and $1 billion for fiscal year 1998–2005 would be consistent with the administration's plan.

SRF Role in Watershed Protection

Our second major goal for the SRF program is to build bridges between SRF programs and State efforts to manage water quality on a watershed basis.

We have made good progress in reducing water pollution over the past 20 years. As the number of impaired waters declines, however, it is increasingly important that we focus our limited resources on solving the remaining pollution problems and get the "biggest bang for our buck."

In addition, many of the remaining water pollution problems involve many different pollution sources. It is important that we approach these problems in an integrated, holistic way that also encourages local stewardship of water resources.

In response to the changing nature of water pollution problems, we are encouraging States to manage water pollution on a watershed basis. Key elements of watershed management include assessing the environmental health of the watershed, identifying various sources of pollution, identifying management and environmental goals for the watershed, and developing a plan for control of a range of pollution sources as needed to attain or maintain environmental goals. For the watershed approach to be successful, we need to be sure that watershed plans can draw.on the full array of tools to implement water pollution control projects and measures. One of our most important water pollution control tools is the cost-effective financing of pollution control facilities by the SRFs.

One of the key issues to be addressed as we work to improve coordination between SRFs and watershed planning is the degree to which pollution control projects called for in watershed plans, such as those developed under the National Estuary Program, should be given priority over projects not covered by a watershed plan. We are working to develop a process for highlighting the values of coordination between SRF programs and watershed plans. As part of this effort, we are working with States to develop an "SRF Funding Framework". This Framework will promote the integration of the highest quality water quality priorities among the point source, nonpoint source, and estuary programs.

The Clean Water Act has always given States considerable flexibility in selecting projects for grant and loan funding. The Framework does not have a mandatory focus of SRF funds on projects identified in watershed plans, but it does highlight the importance of SRF programs considering State water quality objectives, including watershed plans, in project selection and make a full range of projects eligible for assistance.

An important benefit of expanded coordination between SRF programs and watershed management will be improved control of nonpoint sources of pollution, including improved control of runoff from urban areas. Over the past several years, State water quality monitoring reports have made it increasingly clear that nonpoint sources are a major cause of water pollution and these sources impair more waters than any other type of pollution source. We now know that agriculture is the leading source of pollution in 60 percent of the impaired river miles, 50 percent of the impaired lake acres, and 34 percent of the impaired estuaries that the States assessed in 1992.

We will not solve the Nation's water pollution problems until we develop an effective response to nonpoint pollution. I am convinced that the development of watershed plans, complementing statewide nonpoint programs under section 319, is the best strategy for solving nonpoint pollution problems.

Although the SRF will not be able to finance all the projects that will be needed to address the serious problems caused by nonpoint pollution, we must bring the valuable financing tools available through the SRF program to bear on nonpoint pollution.

Small and Disadvantaged Communities

A third goal for the SRF program is to do a better job of assuring that the financing offered to small, disadvantaged communities is more affordable.

The Administration has supported, and continues to support, amendments to the Clean Water Act to provide small, disadvantaged communities with loan forgiveness and extended repayment periods where these revised loan conditions are needed to keep costs within affordability guidelines developed by the States.

The problem of high project cost in small communities has been addressed to some extent without legislation. Over the past several years, some States have developed special financing initiatives to keep sewer rates affordable. In addition, we are working with the Department of Agriculture (USDA) to coordinate USDA grants and loans to rural communities for sewage treatment projects with financing under SRFs.

The conference report on the fiscal year 1996 EPA appropriations bill provides for the use of $50 million in SRF funds to assist impoverished communities with financing of sewage treatment projects. We expect to use these funds in coordination with SRF loans to keep project costs down. This authority will play an important role in improving project affordability.

Other Goals for the SRFs

We have a number of other goals for the SRF program.

The Senate recently passed legislation to reauthorize the Safe Drinking Water Act. The bill includes new authority for State loan funds for drinking water projects. In the event that the President ultimately signs drinking water legislation, we will assure that the wastewater SRFs are well coordinated with new drinking water SRFs.

We are working with our State and local partners to assure that they have the flexibility to provide the most cost-effective wastewater treatment facilities. Privatization of sewage treatment facility operation or ownership is one option that local officials should explore. In July of this year, Administrator Browner approved the sale of a publicly owned sewage treatment plant to a private company under the authority of Executive Order 12803. EPA recently testified on privatization issues in the House of Representatives and I would like to submit a copy of that testimony for the record.

Finally, we are committed to continuing our work assisting communities with extraordinary sewage treatment needs. We are working to provide needed sewage treatment infrastructure for "colonias" in Texas and other border States, communities along the Mexico border that need treatment facilities, Alaskan Native Villages, and other communities facing special circumstances.

CONTROL OF URBAN WET WEATHER POLLUTION

Water pollution from urban areas during periods of wet weather or snowmelt a major contributor to water quality problems in our Nation's waters. Rain washes streets, parking lots, and industrial facilities and picks up toxics and other pollutants along the way. In urban areas, the rainwater is discharged from storm sewers, overflows from combined storm and sanitary sewers, and overflows from overloaded sanitary sewers. EPA is committed to reducing these problems through a responsible, common sense approach that includes the active involvement of municipal officials and interested parties.

EPA has created a Federal Advisory Committee to discuss urban wet weather problems and to recommend regulatory approaches for control of these sources. The Committee is comprised of representatives of all interested sectors—local governments, State governments, several industrial sectors, environmental groups, and the Federal Government. The Committee will advise EPA on a range of issues including the best practices to manage this pollution, cost-effective monitoring, coordination of wet weather pollution control and watershed planning, and interpretation of water quality standards during wet weather. The Committee and its associated subcommittees have already met several times, most recently last week here in Washington, DC.

Municipal Stormwater Discharges

According to water quality assessment data received from the States, stormwater remains as one of the top three sources of pollution in the rivers, lakes, and coastal waters they have assessed. Stormwater contains oil, disease causing bacteria, pesticides, sediments, metals, toxics, trash, and other contaminants from streets, parking lots, yconstructionsites, and commercial and industrial areas.

In addition to public health problems and environmental damages, stormwater pollution costs our coastal areas millions of dollars a year in damages to aquatic resources and tourism.

The 1987 amendments to the Clean Water Act established a two-phased stormwater program. The first phase of the stormwater control program, addressing stormwater discharges associated with certain industrial activities and municipalities with populations greater than 100,000, has been in effect since 1990.

EPA has built significant flexibility into the operation of the storm water program to foster innovative solutions to local problems. We have put the emphasis on pollution prevention because pollution prevention provides the greatest opportunities for cost-effective pollution control.

Instead of EPA dictating a series of steps that cities must take, municipal permit applicants propose their own management and control programs with EPA or State approval to ensure adequate protection of the environment. As a result, these management programs include many common-sense alternatives tailored to decrease burden on the municipalities while protecting the environment.

Contrary to the myth that stormwater control is unaffordable, many pollution prevention strategies are common sense, cost-effective strategies that are up and working. Many municipalities have found that preserving natural drainage and vegetated wetlands have significantly reduced costs. Other basic good housekeeping such as covering waste piles, used oil recycling, street sweeping, yard waste collection, and detention ponds for runoff provide cost-effective prevention.

Phase I of the stormwater program also provides for permits for discharges of stormwater from specified industrial sites. EPA provided industries with the option of either individual permits or general permits. General permits allow for similar facilities, (*e.g.*, all construction sites) to apply and be covered by a single permit. General permits provide significant savings for both industry and the regulating authority. As of last year, almost 150,000 industrial facilities were covered by stormwater general permits.

Phase II of the municipal stormwater program will address other stormwater discharges, including municipalities under 100,000, to the extent necessary to mitigate impacts on water quality.

In an August 1995 regulation, we developed a two-pronged approach to.address Phase II of stormwater pollution control. Under this approach, permits are required only for those facilities determined to be significant sources of pollution or that have been determined to cause water quality problems. All other Phase II discharges will not be required to have permits until after August 2001, and then only if the regulations at the time require that permits be issued.

EPA has formed a subcommittee of the Wet Weather Advisory Committee to examine the approach to Phase II of the program. The subcommittee's charge is to recommend which currently unpermitted stormwater sources need to be addressed and to develop a framework for doing it. We expect to propose an approach to these Phase II sources in the fall of 1997.

EPA, the private sector, municipalities, and environmentalists agree on the need for a reasonable, cost-effective, common-sense approach to control of contaminants in stormwater. We have a process in place to assure the involvement of all interested parties in the development of the stormwater program and sufficient authority to implement an appropriate program.

The Administration supported improvements to the stormwater program in the last Congress and we remain open to further discussions about amendments to the Clean Water Act that would help assure a balanced and affordable storm water program that is also protective of public health and the environment. At the same time, we are concerned that some of the drastic legislative changes that have been proposed would undermine the environmental improvements already realized and those that will result from the new streamlined process envisioned by the Agency and interested parties.

Combined Sewer Overflows

Overflows of combined sanitary and storm sewers, or CSOs, occur during periods of heavy rainfall of snowmelt when sewers that are designed to collect both sanitary sewage and stormwater exceed their capacity. CSOs discharge untreated human waste, toxic materials and debris, mixed with stormwater, to rivers, lakes, and estuaries. These overflows occur in over 1,000 cities and are a public health threat and a major cause of beach closings and waterbody impairments, particularly in the Northeast and Great Lakes.

EPA, along with States, cities, and environmental groups developed in 1994 a national policy that describes cost-effective approaches to control of CSOs so that water quality is protected. The CSO policy is an innovative, consensus approach that is the product of successful negotiations among interested parties. The policy gives cities the flexibility to develop cost-effective controls that are tailored to local conditions and can be implemented in a reasonable period of time. EPA is now working with State and cities to implement the policy.

Sanitary Sewer Overflows

EPA is also working to address the problem of sanitary sewer overflows, or SSOs. Sanitary sewers are designed to collect municipal and industrial wastewater, allowing for a certain amount of groundwater infiltration and unavoidable stormwater that may enter the system, and transport them to a sewage treatment plant. Defective pipe joints and cracked sewer lines, however, can allow excessive amount of water to enter the system. In other cases, excessive sewage volumes from unplanned development may simply overload a sewer system. Either of these cases may cause overflows of raw sewage into streets, yards, and back-ups into homes.

We are addressing SSOs through the Wet Weather Federal Advisory Committee process. The SSO subcommittee met recently to discuss improvements to the SSO control program including incentives and minimum standards to improve operation and maintenance of sewer systems.

OTHER MUNICIPAL POLLUTION CONTROL PROGRAMS

EPA is making good progress in implementing several other programs for control of water pollution from municipalities, including programs to control discharges of industrial wastes to sewage treatment plants, and to protect the quality of sewage sludge. We have also made progress in reducing the transaction costs of municipal permit application and reporting while maintaining the same level of environmental protection.

Pretreatment

The pretreatment program has been very successful in reducing the discharge of toxic pollutants by industry into sewage treatment systems. Over 100,000 tons of pollutants are removed each year by the program.

To improve the efficiency of this program, EPA is working with States, cities, and industries to streamline the core program regulations. The first phase of this effort, to be proposed in the near future, will make it easier for cities to modify their pretreatment program to reflect local conditions. We are also working on a second phase of this streamlining effort that will involve a comprehensive review of all pretreatment regulations.

Sewage Sludge

Our sewage sludge program has made significant progress in reducing the public health and environmental risks from the use of sewage sludge. We have also improved public acceptance of recycling nutrients and organic materials in sewage sludge through land application.

The first phase of the control program, development of standards for a group of contaminants found in sludge (termed "Round I"), is well underway. Standards were published in February 1993, and have been amended in response to concerns of interested parties. We have recently submitted a "Round II" list of sewage contaminants and are moving forward to add those to the program.

We are also working to increase flexibility in the program and encourage States to take a greater role in this effort. We are looking at ways to streamline sludge permit regulations and are beginning a dialog with ten States on changes they would like to see in the program.

Burden Reduction

One of the highlights of President Clinton's Regulatory Reinvention Initiative for EPA deals with reducing reporting burdens. Reporting of monitoring results under the national discharge permit program is one of the largest reporting burdens in the Agency.

We are proposing to reduce these burdens based on a showing by permittees that they have and can maintain excellent records of compliance or can show that the are actually doing better in controlling pollutant discharges than their permits require. In addition, we are working to revise and streamline permit application forms, encourage the use of electronic data reporting, and encourage the use of voluntary comprehensive environmental management systems.

EPA COMMENTS ON S. 1390 AND S. 1391

Chairman, your letter of invitation requested that I comment on two bills introduced by Senator Pressler related to enforcement of the Clean Water Act.

We are still analyzing.both bills and would like to work with the Committee through our enforcement office to provide Agency comments. We have some concerns about both bills and would be happy to discuss these issues.

S 1390 would create general authority for violators of the Clean Water Act, at their sole discretion, to direct penalties assessed for past violations of law to a variety of environmental projects related to the local community where the violations occurred. EPA currently supports the concept of allowing violators to conduct environmentally beneficial projects in settlement of past violations. This is expressed in the newly issued EPA policy on Supplemental Environmental Projects (SEPs) in enforcement settlements. This policy encourages and sets the conditions under which EPA can negotiate with violators for inclusion of these projects in settlement agreements. Some of the more important requirements are that: (1) a violator must first comply with the environmental laws violated; (2) no credit against the penalty is given for projects necessary for compliance; (3) there generally must be a relationship between the project and the environmental or public health harm the violation caused; and (4) the principles of deterrence must be preserved (*i.e.*, a violator should not benefit from illegal conduct).

EPA uses these principles to decide when an environmental project is appropriate and then negotiates for the consent of the violator to perform the project. The project is then made an enforceable part of the settlement of the enforcement action.

We are concerned that this bill as currently written does not accomplish ail of these goals. For example, it is not immediately clear that the bill forbids a person getting credit for required compliance projects. In addition, the bill does not provide safeguards that would prevent projects from being used inappropriately—such as to avoid the government's recovery of economic benefit from violators to 'level the playing field,' or to—undermine deterrence. In addition, there are procedural problems posed by this legislation, such as the mechanism for achieving the environmental agreements, and the follow through for implementation of the environmental project. It is not clear whether the agreement would have to be in an enforceable document such as those authorized by the Clean Water Act, which includes district court orders.

We would be pleased to work with your staff in providing technical drafting assistance to revise this bill to complement the wise and effective enforcement policy currently embodied in the Clean Water Act.

S. 1391 would prevent the EPA from seeking any penalty from a local government after a consent agreement or administrative order is agreed to unless EPA established that the local government had not acted in good faith. Further, it appears that this legislation could be construed to immunize municipalities even for substantial past violations if the compliance plan addresses those violations prospectively.

EPA has recently amended its Clean Water Act penalty policy to allow for special consideration of municipal defendants, in order to avoid inequitable enforcement.

We have several initial concerns with the bill as drafted. For example, we are concerned that using a lack of "good faith" to determine penalty liability is so subjective that it would prevent effective enforcement of this proposal by citizens or EPA. In addition, the bill could harm citizen suit penalty enforcement in many cases, since it is common for violators who are the subject of such lawsuits to be subject to State orders that have not resulted in permit compliance. (The *Gwaltney* case in the Supreme Court requires that violations be ongoing at the time that a citizen suit is filed.)

CONCLUSION

Mr. Chairman, we can look back on the past 20 years with pride and say that we have established, beyond a doubt, that it is within our reach to restore the quality of waters badly degraded by sewage pollution and support the revitalization of urban areas

At the same time, it is clear that pollution associated with urbanized areas, including sewage and stormwater discharges, continues to cause serious impairments of water quality, especially in coastal areas. This pollution reduces recreational opportunities and can have significant long-term economic costs.

I hope that I have convinced you that the existing Clean Water Act provides us with a solid foundation of authority to respond to water pollution from municipal sources.

We are fortunate to have a flexible and effective loan fund program to assist local communities in financing pollution projects. We have developed a stormwater program that emphasizes pollution prevention and common sense. We have sound policies for the control of overflows from sanitary sewers and from combined sewers. We have effective pretreatment and sewage sludge programs. And, we are working to identify and implement additional measures to streamline program management.

In addition, I give you my assurance that EPA will implement the existing legislative authority in a responsible manner that is informed by, and sensitive to, the concerns of local government officials.

There are clearly amendments that would improve the parts of the Clean Water Act related to municipal pollution control, such as providing an authorization for the SRF program. EPA has proposed or supported amendments in these areas in the past.

Unfortunately, in recent months, we have seen a number of proposals that would drastically revise and limit our authority to address these water pollution problems. Any constructive adjustments to the existing legislation would be debated in the context of these more drastic proposals and the ultimate outcome of these debates is very uncertain.

Mr. Chairman, EPA stands ready to work cooperatively with you and the Committee to improve our ability to address water pollution from municipal sources in whatever way you believe to be most appropriate.

Thank, Mr. Chairman. I will be happy to answer any questions you may have.

RESPONSES BY ROBERT PERCIASEPE TO QUESTIONS FROM SENATOR WARNER

Question 1. Mr. Perciasepe, a number of communities in my State have initiated construction to meet the Federal mandate to control combined sewer overflows (CSOs) and the EPA's CSO control policy. These communities will use primarily local funds to pay construction costs through various bond and loan arrangements.

What is the status of compliance by other CSO communities throughout the Nation? Have most cities begun construction or are they only in the planning stage?

Answer. Since EPA issued the final CSO Control Policy in April 1994, many communities are proceeding to develop and implement CSO control programs consistent with the principles of that policy. The status of the development and implementation of local CSO programs varies widely. Some communities are just beginning to develop their control programs while others have already completed implementation of major programs that were started years ago. Many CSO communities are implementing or will soon implement the controls identified in the CSO policy as the Nine Minimum Controls (NMC). The NMC can reduce CSOs and their effects, do not require significant engineering studies or major construction, and can be implemented in a relatively short period of time (approximately 2 years or less). The NMC provide a best available technology control of CSOs until long-term CSO control plans and permits are in place, at which time the NMC become part of the permit. Cities are also progressing in the development of long-term CSO control plans designed to achieve compliance with water quality goals under the Clean Water Act (CWA).

Nationally, there are approximately 1,100 communities with combined sewer systems (CSSs) that have CSOs. Based on recent information, we believe that of these 1,100 communities, at least 80 percent are proceeding to implement the NMC, developing CSO control plans, or initiating or completing construction of CSO control projects. Less than 20 percent have not undertaken CSO control activities. More specific information on selected EPA regions follows.

In EPA Region I (New England), there are approximately 118 communities with CSOs. Of these, 38 are developing plans to control their CSOs; 29 have completed planning and have moved to the engineering design and implementation phase; and 18 have completed CSO programs or specific CSO projects. The remaining 33 communities will initiate the development of CSO control plans in the near future.

In EPA Region II there are approximately 120 permitted combined sewer systems. The majority of these systems are under permit to comply with the nine minimum control measures. Approximately 25 of these 90 CSO permittees in New York (over

50 percent of statewide CSO's) are in various phases of long-term CSO planning, development, and implementation. New York City, the largest CSO permittee in the Region, has placed a major emphasis on the short-term control plans to comply with applicable water quality standards. Over 50 percent of the city's combined sewer drainage area is currently boomed and skimmed to remove both toilet and street-generated floatables. Other parts of the city are controlled under a catch basin "hood" program while permanent long-term solutions are determined and implemented.

In New York State, CSO abatement facilities are completed in Rochester (deep tunnel system, EPA CSO award winner), and Yonkers (swirl concentrator) and in North Tonawanda (storage).

New Jersey CSO permittees are required to develop long-term control plans through the State general permit for combined sewer systems and POTW permits. This permit establishes a limit for the discharge of floatables of 0.5 inches for which all permittees must submit plans to comply with.

In EPA Region III (DE, DC, PA, MD, VA, and WV), there are 198 communities with CSSs.

In Pennsylvania, 70 of 120 communities have National Pollutant Discharge Elimination System (NPDES) permit conditions (provided for under Section 402 of the CWA) for implementing the NMC and for developing long-term CSO control plans. An additional 30 communities (above the 120 previously identified), in the Pittsburgh area, are subject to a recently issued General Permit requiring them to implement the NMC and to coordinate with the regional sewer authority in the Pittsburgh area in developing a longterm control plan.

In West Virginia, all 62 communities with CSOs are required to implement the NMC. Of these 62, 40 have submitted final NMC implementation plans to the State and should be starting design/implementation activities very shortly. In West Virginia, the extent of their long-term planning will be established by the degree to which the NMC achieve compliance with applicable State water quality standards.

In Virginia, several cities have projects underway:

- Richmond is proceeding with projects to construct CSO conveyance systems to remove and treat CSO discharges from the James River Park areas and to construct a swirl concentrator facility at the Richmond Wastewater Treatment Plant. After these projects are completed and operational, the City will re-evaluate the CSO Control Plan to determine whether changes to the approved plan are necessary. The City will submit a report to the State proposing a plan and a schedule for a capital program to implement additional elements of the CSO Control Plan, taking into account the City's financial capability and the availability of Federal, State, and local funds.
- Lynchburg's CSO control program is a three-part program leading to total sewer separation at a cost of $208 million. The planned separation program will go beyond the year 2000. Using grant money from EPA, Lynchburg is completing a study on how to allocate these costs to its rate payers in an equitable manner. EPA believes that Lynchburg's experience can be a model that other communities can use to allocate costs among rate payers.

In EPA Region V (IL, IN, MI, MN, OH, and WI), the status of CSO control activities varies significantly from State to State.

In Indiana, there are 124 communities with CSSs that have CSOs. Of these, 81 are proceeding to implement the NMC and to initiate planning for long-term CSO controls; and 6 have started construction of CSO control projects or completed such projects. In Illinois, 104 communities have completed CSO control projects or have on-going projects; 1 is in the planning phase. The majority of the 104 communities have projects and programs that predate EPA's 1994 CSO policy and were required by State law. EPA Region V believes most of these projects are consistent with the 1994 policy.

In Michigan and Ohio, there are a total of 192 CSSs that have CSOs. Of these, 154 have initiated planning or started construction activity; 27 have completed construction of CSO control projects; and only 11 have no current CSO control activities underway.

In Minnesota, the cities of Minneapolis, St. Paul, and South St. Paul, the only communities with CSSs that have CSOs, are completing a major sewer separation project that will eliminate all CSOs in the region. The project will be completed in the next year or two.

Wisconsin has two communities (Milwaukee and Superior) that have completed construction of CSO control projects.

Question 2. Mr. Perciasepe, the EPA's 1994 Municipal Wastewater Needs survey reported $145.7 billion in wastewater construction needs to meet permitted requirements. This overall amount included $42 billion to meet Combined Sewer Overflow

(CSO) control requirements, about half of which is based on permitted needs and half on needs estimated or modeled from the assumptions of the agency's CSO policy. Two cities in my State alone have estimated costs at over $600 million to meet State consent orders based on the Federal requirement.

It is my understanding that the city of New York alone estimated costs of $16 billion to comply with CSO requirements. I am concerned that the Federal Government does not have a complete survey of the cost necessary to meet the CSO mandate. Will EPA conduct a needs survey in 1996 as provided by the Clean Water Act and will CSO construction needs be counted on a city-by-city basis?

Answer. The $137.1 billion in needs reported in the 1992 Clean Water Needs Survey (CWNS) was not limited to the costs of new construction and upgrades to meet permit requirements, but also includes a wider range of other State Revolving Fund (SRF) eligible projects such as nonpoint source needs.

All of the $41.2 billion in CSO needs reported to Congress was based on a model of needs for 1,300 facilities in about 1,100 communities based on the assumption of compliance with the final CSO Policy. We chose to use the model estimate rather than the documented needs of $22.4 billion reported by the States because the documentation only represented the needs of 375 facilities.

In terms of Virginia's CSO need, both the model estimate and the documented needs reported by the State in 1992 were nearly the same. The estimate of Virginia CSO needs you cite in your question is not much different than our current estimate. However, the estimate of New York City CSO needs you cite is more than twice the estimate of $7.0 billion documented by the State of New York or the $6.3 billion we modeled in 1992 for the whole State. Unfortunately, we are unable to comment on the $16 billion need for New York City (quoted in your question) because we are uncertain of the origin and basis for this estimate.

In the 1992 Survey, we developed two estimates of CSO needs. One was modeled by EPA and the other based on documentation provided by the States. For the 1996 Clean Water Needs Survey, we intend to use both documented and modeled estimates to derive a single facility-by-facility need as you suggest. (In the sampling EPA conducted to validate the model used, we found the model provided a reasonable estimate of actual needs.) This method will take into account the CSO needs of cities that have not yet been able to independently estimate their needs based on the CSO policy.

EPA is currently in the process of conducting a 1996 CWNS. A national kick-off conference was conducted in late October 1995, which was attended by representatives from Virginia and about forty other States. The Needs Survey Report is due to Congress in February 1997. At this point, because of funding uncertainties and the effects of two Federal Government shutdowns, it appears that the 1996 Report may be delayed. The fate of the Needs Survey remains uncertain pending the final resolution of EPA's appropriations for fiscal year 1996.

Question 3. Mr. Perciasepe, on Monday, the *Washington Post* reported that communities and States are going to need "a lot more money," in the words of a Pennsylvania official, to clean up the Chesapeake Bay by cutting the flow of nitrogen and phosphorus by 40 percent by the year 2000 as planned in 1987. The article also reported that $675 million worth of local Government construction is estimated to meet the Chesapeake Bay objective.

Does the year 2000 goal for the Chesapeake Bay remain achievable and reasonable?

Since loans from the State Revolving Fund (SRF) loan program have to be paid back from user charge funds, shouldn't the States have the flexibility to make grants from the SRF for any size community?

Answer. EPA Administrator Carol M. Browner was recently elected chair of the Chesapeake Executive Council. Administrator Browner took over the chair of the Chesapeake Bay Program's governing body from Virginia Governor George Allen on November 30, 1995, at the last meeting of the Executive Council. At the November 30 Council meeting, all of the Council members (including the Governors of Virginia, Maryland, and Pennsylvania, the Mayor of the District of Columbia, Administrator Browner and the Chair of the Chesapeake Bay Commission) reiterated their strong support to retain the goal of reducing nutrients (nitrogen and phosphorus) in the Bay by 40 percent by the year 2000. To the credit of prior Executive Council members, the goals set for Bay restoration have always been tough.

The goals set by the Council for the Chesapeake Bay serve as the driving force for intergovernmental cooperation in this bi-partisan effort, which has become an example to the world. When nitrogen was first identified as a culprit pollutant in the Bay, scientists and managers were concerned, because of the high cost of removing the nitrogen from sewage treatment plants. Nevertheless, the Council set the challenging 40 percent reduction goal, which gave the Bay Program the impetus to find and develop cost-efficient, nitrogen removal technologies for sewage treatment plants, and to continue and increase efforts to reduce nutrient inputs to the Bay as a result of polluted run-off. As a result of these efforts, we are now seeing increased nutrient reductions all over the watershed today.

EPA does not believe that the costs of sewage treatment plant upgrades will approach the $674 million estimate made by the Fairfax County Official. Experience to date, based primarily on pilot projects for nitrogen removal at sewage treatment facilities in Maryland, shows localities may actually save money in meeting other regulatory requirements. For example, meeting the Virginia ammonia standard, required under the Clean Water Act, may be more cost-efficient through nitrogen removal technologies than by using current ammonia reduction technologies alone, therefore achieving both ammonia and nitrogen removal goals at the same or lower costs. The Chesapeake Bay Program, working through our consultants at Virginia Polytechnic Institute, has achieved these results by working with local Maryland authorities in eight separate pilot projects using biological nitrogen removal techniques.

There is no doubt that meeting the 40 percent nutrient reduction goal will be a challenge, but it is also achievable and reasonable. The public is behind the effort and much has already been invested. Neither the Administrator, nor any other member of the Executive Council, is inclined to loosen any of the goals set by the Bay Program. The current Bay Program budget provides funds to begin working with Virginia and Pennsylvania localities—10 to continue implementation of Bay Program goals and commitments through additional nitrogen removal at sewage treatment facilities.

Under the SRF program, repayments from SRF loans are recycled by the States and reissued to communities as new loans for water quality infrastructure projects. States have a great deal of flexibility with this program, including the ability to issue SRF loans to communities of any size they choose and to offer varying interest rates, including zero interest. Because the SRF program was created to provide a long-term and self-sustaining source of funding for community water-quality infrastructure projects, grants may not be made from the SRF program.

Under the Construction Grants program, which is currently in the process of closing down, States made grants to communities for wastewater projects. In some States, completion of previous Construction Grants projects have resulted in the recovery of excess funds. States have two options for the future use of such funds: they may be deposited in the SRF to further capitalize that program; or they may be reissued as grants for wastewater projects. States, at their discretion, may choose either option. EPA generally recommends that such funds be deposited in the SRF as this option will result in a far greater purchasing power for environmental infrastructure over the long-term.

In some cases, retaining these excess funds for use as grants may be a more appropriate option. It is our understanding that the State of Virginia will have a significant amount of these recovered Construction Grants funds this year. EPA's Chesapeake Bay Program Office has suggested that the State consider using these funds as grants to fund nutrient removal projects to further the implementation of the Chesapeake Bay cleanup. If the State determines that the use of these funds as grants is the most appropriate option, EPA would support that decision.

Finally, the administration is concerned that some small communities (under 10,000 population) cannot benefit from economies of scale and may face very high user charges, even if an SRF loan is provided at very low interest rates. The administration has expressed support for helping these communities reduced annual user charges through extension of loan repayment periods and, in some cases, forgiveness of loan principal. On a national basis, there does not appear to be evidence that most communities of greater than 10,000 population have a need for this kind of adjustment of loan terms.

Question 4. Mr. Perciasepe, for fiscal years 1995 and 1996, this Administration requested direct grant funding for "any locality" with:

- Over $2 billion in treatment needs; and
- Wastewater residential user charges greater than .65 percent of the 1989 median household income for the metropolitan service area.

This funding was generally understood to fit the city of Boston.

In contrast, two communities in my State each anticipate user charges well in excess of 1 percent for the construction of CSO control facilities totaling $400 million and $210 million respectively. These amounts represent a greater burden for these cities and their rate payers which have not benefited previously from large grant models.

Will EPA consider grants for other communities as it has previously proposed for Boston to deal with community user rates in excess of Boston's?

Answer. In general, the Administration opposes the earmarking of funds for specific wastewater treatment projects. We believe that the State Revolving Fund (SRF) program should be the primary vehicle for providing financial assistance to States and municipalities for the construction of wastewater treatment facilities. Targeting of funds for specific communities draws funds away from SRFs which are designed to provide funds for the highest priority projects in each State.

However, the Administration recognizes that there are unique circumstances where special line item funding is appropriate. One such situation involves those communities with large secondary treatment needs and high user fees. Accordingly, the Administration requested grant funding for fiscal year 1995 and fiscal year 1996 for the "Special Needs Program." This program is targeted for cities with documented secondary treatment needs in excess of $2 billion and with residential wastewater user charges in excess of 0.65 percent of median household income. The criteria used to develop these parameters of the special needs program were based on various analyses that compared wastewater treatment needs against the financial impact of addressing these needs. EPA identified only two cities (New York and Boston) which have secondary treatment needs in excess of $2 billion and, of these two cities, only Boston has a user charge which exceeds 0.65 percent of median household income.

The strict eligibility criteria contained in the "Special Needs Program" were established to ensure that only cities with extraordinary secondary treatment needs and high user fees would qualify for funding. However, we are concerned about the cost burden faced by other communities and are reviewing options to address the infrastructure needs of communities that face exceptionally burdensome costs to meet secondary treatment standards.

RESPONSES BY ROBERT PERCIASEPE TO QUESTIONS FROM SENATOR REID

Question 1. What is utility manhole dewatering?

Answer. Utility manhole dewatering is the removal of excess water from utility manholes, done typically to allow for dry access into the manhole for service and maintenance. Utility manholes, usually found in streets, are the below ground access points to key portions of underground utility lines which may include electrical power lines, cable TV lines, telephone lines, gas lines or other common utilities. To dewater the manholes, utility companies will mechanically pump the manhole dry. The pumping produces a water discharge. The water found in manholes may get there from rainfall runoff that leaks into the manhole, from snowmelt leakage, from uncontaminated groundwater infiltration, or combinations of any of these. This water may pick up a number of pollutants, such as leaked oil from roads and whatever pollutants are present in groundwater.

Question 2. Is manhole dewatering covered by the Clean Water Act?

Answer. Utility manhole dewatering is covered by the Clean Water Act (CWA) if the pumped manhole water is discharged to a water of the United States. Under these circumstances, the pump would constitute a point source discharge of pollutants to waters of the United States, which is prohibited unless authorized by a permit as required under Sections 301 and 402 of the CWA. The Agency can envision three ways in which this could occur.

First, the utility manhole water may be *directly* discharged into a water of the United States. In this instance, as in all instances of direct discharge of a pollutant from point sources, the discharge would require a National Discharge Pollutant Elimination System (NPDES) permit. Because most manholes are typically located closer to storm water drains than they are to surface waters, we expect most dewatering operations discharge into the storm drains and not directly to surface waters. If however there were a sufficient number of utility manholes within a State discharging directly to waters of the United States, the permitting authority can write a general permit that covers all dewatering discharges in the State.

Second, the utility manhole water may be discharged into a storm drain that feeds into a combined sewer system (one which collects and conveys both sanitary wastes and storm water runoff). This discharge would not require a separate NPDES permit because the manhole water would be conveyed to a sewage treatment facility that has a permit. If the manhole water discharged into the combined sewer is posing a danger to the operation of the sewage treatment plant, its operators, or if it is interfering with the plant's ability to effectively treat wastewater, then local authorities can impose requirements on manhole dewatering under the pretreatment program operated by the treatment facility. These requirements would be imposed by the municipality, and not the Agency.

Last, the utility manhole water may be discharged into a storm drain that feeds into a municipal separate storm sewer system (MS4); this is a very common disposal method. In this case, as with discharges to combined sewer systems, the discharge would not require a separate NPDES permit and would generally be allowed by the MS4. If the manhole dewatering discharge is specifically addressed by the permit for the MS4, then the discharge would be authorized subject to the terms of this permit. A municipality may want to prohibit or control such discharges because the municipality is ultimately responsible for the quality of the water from its storm sewer system where it discharges into waters of the United States.

Currently, storm water permits are only required of MS4s that serve populations over 100,000 or where the permitting authority (the Agency or State) requires a permit because the MS4 is a significant contributor of pollutants to the surface water or is the cause of water quality problems. These permits are issued under the authority of CWA section 402(p). EPA and authorized NPDES States are in the process of implementing a storm water permitting program that is environmentally protective yet flexible, and based on common sense. This program is based on the use of low-cost, yet highly effective, best management practices (BMPs) as the means to protect the environment. Storm water permits give municipalities considerable flexibility in designating which BMPs will be used.

For all other MS4s (those serving populations less than 100,000), the Agency issued a rule in August 1995 that gives these MS4s 6 years to submit a permit application. During this time, the MS4 can discharge without needing a permit, and utility manhole water sent to the MS4s is allowed. This rule was designed to provide sufficient time for the Agency to work with its stakeholders to develop a targeted, environmentally protective and cost-effective approach for controlling storm water in these other MS4s.

Finally, there are a few isolated cases where utility manhole dewatering would not be addressed by the CWA. For example, some discharges are pumped into a tank truck for more advanced processing or treatment. This is commonly done where PCBs or other toxic or hazardous contaminants are know to be present in the manhole.

Question 3. Doesn't the Clean Water Act require that all discharges be done only by permit?

Answer. As noted above, under Sections 301 and 402 of the CWA, the discharge of pollutants from a point source to waters of the United States is prohibited unless authorized by an NPDES permit. However, as explained above, manhole dewatering is often not directly discharged to waters of the United States. Because discharges from manhole dewatering to MS4s are addressed through the MS4 permit, they do not require a separate permit. Discharges to sanitary sewer lines or combined sewer systems would be controlled under the NPDES permit for the POTW, which may include pretreatment requirements, but would not require a separate permit.

Question 4. Is the utility industry currently in compliance with this aspect of the CWA?

Answer. The Agency has not investigated this question and thus does not currently have the information to fully answer this question. However, as discussed in answer No. 2 above, the Agency expects that most utility manhole water is discharged to MS4s. Because municipalities, in meeting their permit requirements, generally establish BMPs as the means for controlling discharges such as manhole dewatering, the Agency expects that the industry would be in general compliance with these conditions.

Question 5. Is manhole dewatering a storm water issue or an industrial discharge?

Answer. Even though the original source of such water may be storm events, manhole dewatering is not storm water discharge because it is neither runoff nor surface drainage. Manhole dewatering discharges, however, may be permitted as authorized non-storm water discharges under the terms of municipal storm water permits. As explained above under question No. 2, it may be a wastewater discharge issue or it may be a sanitary sewer inflow issue.

Question 6. Isn't the position of many within the utility industry that the dewatering is a storm water issue so that they can avoid compliance with the 1984 [SIC] amendments?

Answer. The Agency does not know the motivations of the industry. However, any claim that utility manhole dewatering is a storm water source does not avoid coverage under the Clean Water Act. As explained in answer No. 2, these discharges, if they reach waters of the United States, will either be permitted by the Agency or authorized NPDES State, or will be regulated by the municipality responsible for the MS4. For those instances where dewatering discharges are made directly to waters of the U.S., and therefore require a separate NPDES permit, the Agency expects that the conditions of the separate permit would be similar to any controls imposed by the municipalities.

Question 7. Could the EPA issue a clarification of position that manhole dewatering is an industrial discharge?

Answer. The Agency could issue a guidance or policy letter that makes such a clarification. However, as described in answer No. 6, whether the discharges are controlled by a permit issued to the utility or by the municipality managing the MS4, this may not result in any substantive difference or improvement in the environment.

Question 8. What is the net cost to the consumer to screen manhole discharges?

Answer. The Agency has not investigated this question and thus does not currently have the information to answer this question. To obtain this information, the Agency would need to collect the information from the utility industry itself. This would take some time because this information collection is subject to the Paperwork Reduction Act. The Agency would first need to develop and get approved an Information Collection Request (ICR) before requesting this information. The process to obtain an ICR will require at least 90 days; additional time will be needed to contact the utilities and for them to collect and submit the information. After this, EPA could respond to the question.

Question 9. Would there be any dispute with an estimate of one bell operating company that estimated such a cost of only $0.05 per subscriber per month?

Answer. The Agency would first need to collect the information described in answer No. 8 to answer this question. Although a cost of $0.05 per subscriber per month seems low, in the aggregate it can be large and thus unrepresentative of the anticipated costs to comply with NPDES requirements. However, if the utility manhole water contains highly toxic substances such as PCBs, the cost of treatment can be hig4, but the Agency expects that these instances will be few.

PREPARED STATEMENT OF MICHAEL B. COOK, DIRECTOR, OFFICE OF WASTEWATER MANAGEMENT

Good afternoon Mr. Chairman and members of the subcommittee, I am pleased to be here today to represent the Office of Water in EPA and to offer our comments on ways the Federal Government can contribute to improving the Nation's environmental infrastructure.

This administration has strived to promote not only increased investment in infrastructure but also to permit enhanced flexibility for our State and local partners in their role of protecting our environment. We see public-private partnerships as another financing option available for communities to meet their infrastructure needs.

THE NEED FOR INCREASED INVESTMENT

The Clean Water Act (CWA) of 1972, contained provisions to address two important sources of water pollution. These provisions, which include both regulation and financial incentives, were directed at the massive problems associated with industrial and municipal source's of pollution. The CWA established regulatory limits for the discharge of pollutants from industrial and municipal "point sources." It also established the Construction Grants program to assist communities in meeting requirements of the Act, particularly in the form of financial assistance to construct wastewater treatment systems.

In 1987, Congress elected to phase-out the Grants program in favor of a system of State revolving loans funds (the "SRF") to be capitalized in cooperation with the States.

These revolving loans funds were seen as a more efficient way to invest funds for the long term and would provide localities with permanent, low-cost sources of financing for a wide variety of environmental infrastructure needs (beyond traditional wastewater treatment.)

Since 1972, the Nation has made significant investments in wastewater infrastructure. Today, the U.S. enjoys what is probably the most advanced network of sewage treatment facilities in the world. Over $66 billion in Federal funds have been invested in this vast network since 1972. Many more dollars have also been contributed by local and governments both for capital investment and for operation and maintenance costs.

The Construction Grants and SRF programs have been major driving forces behind extending modern sewage treatment to more and more of the population. Since 1972, the number of people served by secondary or better levels of sewage treatment has nearly doubled from 85.6 million to 158.9 million in 1992. In 1972, only 42 percent of the population was served by adequate levels of sewage treatment. By 1992, that number had increased to 62 percent of the population.

Pollutant loads to surface waters have also decreased dramatically during this time, in spite of increases in the population served by municipal sewage treatment plants and the corresponding increase in the volume of pollution being treated by those facilities. For instance, since 1972, net pollutant discharges of BOD5 from municipal sewage treatment facilities to surface waters have decreased by approximately 40 percent, from 5.4 billion pounds to 3.2 billion pounds per year.

Our investments in secondary treatment have resulted in very real, even dramatic, water quality improvements. While there are few good sources from which to make estimates of long-term improvements in water quality, we can examine the relative level of progress from 1972 to 1992. Based on information from the Association of State and Interstate Water Pollution Control Administrators (ASIWPCA) and from the *1992 National Water Quality Inventory*, we estimate that the number of waterbodies meeting their designated uses nearly doubled, from approximately ⅓ in 1972 to roughly 60 percent in 1992. Again, let me reiterate that while these two reports are not strictly comparable, they do give us an indication of the relative magnitude of progress we have made over the last 20 years.

While we, as a Nation, have an impressive record of accomplishment in the water arena and in particular, in dealing with the pollution problems caused by municipal sewage treatment facilities, significant challenges remain. While approximately 60 percent of our water resources are in good shape today, 40 percent are not and are still in need of our attention. Of the waters that were impaired (*1992 National Water Quality Inventory*), municipal sources are still responsible for 15 percent of the impairments to our rivers, 21 percent to our lakes, and 53 percent to our estuaries.

EPA publishes a *Clean Water Act Needs Survey* every 2 years to document traditional wastewater needs as well as non-traditional ones, such as combined sewer overflows (CSOs), storm water, and nonpoint sources. The latest survey (1992) includes estimates of total needs at just over $137 billion, including needs of $31 billion for secondary treatment projects, $15 billion for advanced treatment, and $41 billion for CSOs.

EPA is currently in the process of conducting the first national needs survey for drinking water related capital needs. The Agency plans to provide the results of this effort to you in February, 1996. At present the Federal government provides very little support to communities to meet those important human health needs. The administration has continued to urge Congress to create a drinking water SRF, similar to the wastewater SRF to maximize the potential impact of Federal investments in this area and to ensure that the States have independent and permanent sources of funding for these needs.

INNOVATIVE FINANCING

In addition to this Administration's request for substantial funding levels for the Clean Water State Revolving Fund program, EPA is working hard to spur greater investment from non-Federal sources. EPA has sponsored 47 demonstration projects to identify the most promising financing concepts for improving environmental compliance. We have created a State Capacity Task Force that has developed a catalog of alternative financing mechanisms. Our Environmental Finance Centers, located at major universities across the country, train State, local, and other official on environmental financing principles, techniques and issues. EPA is currently working with the Environmental Finance Center at Syracuse University to conduct a study of alternative funding approaches for water and wastewater projects. One of the key features of the study has been a series of four public meetings with key stakeholders to get input on a variety of options for funding these projects. EPA's public-private partnership effort is just one component of the overall strategy to facilitate investment in environmental infrastructure.

EPA considers the use of private resources, including public-private partnerships, to finance construction and expansion of wastewater treatment facilities to be a viable option for community decisionmakers. This option allows the private sector to participate in the financing, construction, ownership, operation, and/or maintenance of the facility. Public-private partnerships produce flexible solutions that can benefit both the community—by providing capital for expansion without necessarily lowering its debt capacity—as well as the private partner, by offering an equity stake in the facility.

The Miami (Ohio) Conservancy District

As you are all aware, this past July, EPA approved the first public-private partnership deal involving a federally funded wastewater treatment plant since the "Infrastructure Privatization" Executive Order (E.0.12803) was signed in April 1992.

The Miami (Ohio) Conservancy District's Franklin Area Wastewater Treatment Plant was designated in December 1992 as one of three U.S. EPA pilot projects as part of the Agency's implementation of E.O. 12803. EPA staff in the Office of Wastewater Management (OWM) worked closely with the State of Ohio, the Miami Conservancy District, and the communities served by the Franklin plant to identify and address the many issues surrounding the sale.

EPA had several different roles in the transaction as result of E.O. 12803, these included:

- providing waivers to the regulations governing the original Federal Construction Grant;
- approving, along with OMB, the sale price of the asset (this was a negotiated rather than a competitive sale), and
- insuring that the public will continue to benefit from the operation of the facility, and
- protecting the interests of the rate payers.

It is also noteworthy, in the context of today's discussion, to point out that a small part of the plant (the oxidation pond) is still owned by the public sector. This was done so that the facility would continue to be classified as a publicly owned treatment works (POTW) under the Clean Water Act and other environmental laws. If the facility were no longer to be regulated as a POTW, the private partner would be subject to unintended regulatory consequences that might otherwise have discouraged the privatization efforts. This plant would no longer be a POTW subject to secondary treatment limitations and pretreatment requirements under the CWA, or the domestic sewage exclusion under the Resource Conservation and Recovery Act. This is an obstacle that needs statutory relief. In fact, *President Clinton's Clean Water Initiative*, which was released last year, recommended that POTWs be defined, for non-financing purposes, as wastewater facilities that serve the general public, regardless of ownership.

Overall we feel that this project is an excellent example of one of the administration's "Principles for Federal Infrastructure Investments," established by Executive Order 12893 on January 26, 1994, which states that "Agencies shall seek private sector participation in infrastructure investment and management . . . and should work with State and local entities to minimize legal and regulatory barriers to private sector participation in the provision of infrastructure facilities and services."

The city of Indianapolis and the city of Silverton, Oregon, are involved in the two other public/private pilot projects sponsored by EPA.

Indianapolis conducted a comprehensive study of the operations and-financial management of its wastewater system to identify and analyze issues associated with the possible transfer of the facilities to the private sector. After reviewing results of the study, the City decided to request proposals for private management of its wastewater treatment plants. Indianapolis selected a private firm in November 1993 to manage the facilities under a 5-year contract. The Environmental Finance Center at Cleveland State University is preparing a case study on the decisionmaking process and financial outcomes of the city of Indianapolis' 1993 decision to contract for private management of the City's two advanced wastewater treatment plants.

The city of Silverton wishes to attract a private equity investor in its wastewater system. The City intends to maintain a 51 percent majority interest in its facilities and invest the resulting equity in capital improvements; the community has crafted a creative proposal that provides for economic development, wetlands mitigation, and wetlands treatment of wastewater flows. We look forward to helping Silverton achieve the financial and environmental successes it seeks through this innovative project.

CONCLUSION

Given the Nation's tremendous environmental infrastructure needs, EPA remains committed to providing State and local governments with as many financing options as possible that serve the public interest. Public-private partnerships can be a viable option for communities and can result in a net increase in environmental infrastructure investments.

Thank you again and I look forward to your questions.

PREPARED STATEMENT OF HON. JEFF WENNBERG, MAYOR, RUTLAND, VT, ON BEHALF OF THE NATIONAL LEAGUE OF CITIES

Mr. Chairman, members of the committee: I am Jeff Wennberg, Mayor of Rutland, Vermont, and a member of EPA's Urban Wet Weather Flows Federal Advisory Committee. I am here today to offer testimony on behalf of the National League of Cities and the 15,000 municipalities we represent on critical Clean Water Act issues. My testimony will focus on wet weather flows in general, but it is the stormwater management program that is of greatest concern to the nation's cities and towns.

STORMWATER

NLC has long advocated reform—but not repeal—of the stormwater program. The program as currently designed fails to meet any of the three criteria for a successful endeavor: it offers dubious environmental benefits; it cannot be implemented; and it is not cost effective.

Is the Stormwater Management Program Environmentally Sound?

Our nation has made significant progress in restoring the health of our waters due largely to the substantial Federal financial commitment to the reduction of point sources of pollution. The principal challenge facing us today comes from nonpoint sources. While any successful effort to reduce pollution flowing into the nation's rivers, lakes and streams will provide some benefit, the basic assumption underlying the stormwater program is flawed.

Run-off from urban streets represents less than 15 percent of the current pollutant loadings, while run-off from farms, ranches, mines, and forestry operations represents more than 80 percent. Nevertheless, the current stormwater management program seems to assume that if we could eliminate municipal stormwater run-off our rivers, lakes and streams would magically meet water quality standards.

Not only is this patently untrue, the consequences of a program founded on this assumption are patently unfair. It would be similar to asking dog owners to finance 100 percent of the municipal program through astronomical license fees because dogs don't use sewage treatment plants.

The stormwater management program requires municipal taxpayers to unfairly bear the greatest burden for wet weather pollution, despite the fact that municipalities have little or no control over the activities of those who do most of the polluting.

Can the Current Stormwater Program Be Implemented?

A recent national TV network program on "senseless" Federal regulations opened with the stormwater program—a telling commentary in itself, given all the material with which they could work. On the program a Maricopa County, Arizona, official stood in a dry river bed as she explained that EPA's regulations require the county to monthly monitor the nonexistent water—at a cost of $20,000—to assure that fish weren't adversely affected.

The current stormwater program is in the great tradition of Federal "one-size-fits-all" mandates. If allowed to continue with these inexplicable and unreasonable demands, we will shortly have a stormwater management program every bit as popular with the taxpayers as the current wetlands program.

The success of the point source water quality program, especially as it relates to POTWs, has encouraged the application of the same approach to remaining water quality problems. The most compelling basis for extending the program to include stormwater discharges is the existing "distribution network" relationship between EPA, the States and localities. Given the existence of this network, the extension of regulatory control over stormwater discharges appears relatively straight forward.

The controversy surrounding this issue—including repeated legislative and administrative moratoria and the FACA—centers on the technical, financial and public policy issues which make wastewater and stormwater wholly different challenges.

The Federal perspective is simply the application of a proven tool to address a new challenge. The local perspective is radically different. Wastewater is "accepted" into a system which is controlled by the regulated authority. The nature of the discharge is remarkably consistent from day to day and year to year. The application of long-proven technologies to remove known pollutants in predictable concentrations has rendered the engineering, building and operating of centralized treatment facilities more of a science and less of a gamble for operators and ratepayers alike. There is clear legal authority for operators to monitor, inspect, regulate and, if necessary, reject the discharge of excessive or harmful pollutants into their system.

Stormwater shares none of these characteristics. While the physical flow of stormwater is sometimes managed, it's rate of flow and chemical content vary wildly from day to day, month to month, year to year, and city to city. There are no proven removal technologies that could reliably achieve water quality standards. The existing standards themselves are based upon dry weather conditions in the receiving waters. Finally, stormwater discharge contaminant sources often include substantial contributions from other sources such as automotive fluid leaks, brake linings, and atmospheric deposition, which are well beyond the control of local authorities. Very simply, a program such as the NPDES permit system, designed to address point sources cannot be sufficiently contorted to make sense in addressing nonpoint sources of pollution.

Just as water itself can vary from storm to storm, the magnitude of the environmental threat varies tremendously from community to community. Urban wastewater is a relatively consistent product regardless of the community or the climate. The degree to which stormwater is or is not a significant environmental issue depends upon community size, patterns of development, climate, the biology and hydrology of receiving waters and the relative magnitude of other local environmental concerns.

Is the Stormwater Program Cost Effective?

Given that the current stormwater management program requires municipalities to meet unattainable objectives at an excessive cost for an unmeasurable benefit, one would have to conclude that the program is not cost effective .

EPA's statistics indicate the average cost of a municipal NPDES stormwater permit exceeds $625,000. That is $625,000 for the permit—not for the removal or reduction of a single pollutant from a single stream.

A recent survey by the National Association of Flood and Stormwater Management Agencies (NAFSMA) indicates that implementation costs are currently ranging from $50,000 to over $20 million annually. I commend this report to the committee's attention as the only credible information available on the parameters of a real-world municipal stormwater management program.

Cities are expending too many of their scarce resources to meet this Federal mandate without the ability to demonstrate that they have accomplished anything, let alone an objective that justifies the costs.

Conclusions About the Stormwater Program

While stormwater contamination may be a first priority environmental concern in some communities and regions, nationally, local officials with responsibility for the general health and well-being of a community rarely find this to be the case. Often, issues such as drinking water, wastewater discharges, air pollution, solid waste, public health, safe housing, and a whole array of social ills pose a far greater risk to the environment and public health than contaminated stormwater.

Local officials argue that the proper allocation of limited local financial resources must be justified against local priorities. The failure to do this increases the risk that we allow greater damage to the environment and public health by diverting resources away from local priorities. We also risk the loss of public support for funding by imposing false priorities from outside the community.

While the current round of permits do not for the most part include numeric effluent limits, State regulators—the permit issuers—anticipate that the next round will include such limits. As NLC has stated in past testimony, no one—not Congress, not EPA, not environmental special interests, and certainly not the Nation's cities—knows how to meet specific numerical limits for stormwater discharges. Unless and until this issue is resolved the only stormwater program that is rational is one that reduces pollutants by implementing best management practices which recognize the vast diversity of conditions across the Nation.

Solutions

NLC believes that to accomplish a nonpoint source pollution abatement objective Congress must:

(1) repeal the current stormwater program;

(2) provide funding for research to determine the magnitude and extent of the problem;

(3) provide funding to determine the benefits of Best Management Practices (BMPs) and other management techniques;

(4) provide funding for research and development, including demonstration projects to local governments, of systems/techniques/technologies with proven ability to remove contaminants from stormwater affordably;

(5) develop and enact an alternative municipal stormwater management program which:

—focuses stormwater management efforts in those regions/climates where the environmental impacts are the greatest;

—addresses stormwater pollution abatement on a watershed basis, involving all, not solely municipal, nonpoint sources; and

—provides for a cost-effective regime based on "outcomes" (improvements in the receiving body's water quality) not "inputs" (end of pipe measurements).

We also believe the approach to addressing municipal stormwater run-off in the House-passed measure, H.R. 961, authorizing State-by-State programs, with required local government input into the decisionmaking process, is a sensible approach that allows appropriate consideration of the nation's hydro-geographical variations. In addition, such an approach allows for prioritization of efforts and consideration of available resources in developing a municipal stormwater management program.

COMBINED SEWER OVERFLOWS

NLC supports codification of the Combined Sewer Overflow (CSO) control policy recently developed by EPA following a modified negotiation process.

The policy would require municipalities with CSOs to implement minimum controls, which we expect will not require major construction, by 1997.

The preponderance of communities with CSOs are the nation's smallest cities, those with population under 10,000. They are largely concentrated in New England and the mid-west. Without the flexibility incorporated in EPA's guidance, these communities have little likelihood of ever being able to afford compliance with the Act's requirements.

The policy, developed in conjunction with the various stakeholders (municipalities, States, environmental organizations), authorizes CSO communities to select a long-term control plan that will ultimately result in compliance with all applicable requirements of the Clean Water Act. The control plans will prioritize remedying overflows to sensitive areas such as shellfish beds or bathing beaches.

CSO communities have the option to select either a program meeting technology-based criteria or an alternative program that can be demonstrated to be adequate to meet the law's requirements. A phased implementation scheduled based on the relative importance of adverse CSO impacts and on the municipality's financial capability is allowable. Communities that have constructed CSOs designed to meet water quality standards are exempted from the planning and construction requirements of the policy.

In addition, the policy encourages stats to adapt their water quality standards and implementation procedures to reflect wet weather events and site-specific conditions.

In addition to codifying the policy, we would urge you to incorporate provisions in the Clean Water Act's CSO provisions that would authorize the issuance of permits for up to 15 years for implementation of CSO controls and autherize the extension of compliance deadlines where it is determined that compliance by the scheduled date is not within the economic capability of the community.

SANITARY SEWER OVERFLOWS

NLC remains unconvinced that there is a need for a new national regulatory scheme with respect to Sanitary Sewer Overflows (SSOs). EPA has been unable to document either the extent, the magnitude, the frequency or the location of SSOs.

As Mayor Jack Lynch of Butte, Montana, vice chair of NLC's Energy, Environment and Natural Resources Committee, who is representing us on the SSO FACA has indicated, "when a sewer backs up into Mrs. Brown's basement, there are two people who care about resolving the problem—Mrs. Brown and the Mayor. We do not need another mandatory national regulation to see to it that the problem does not recur."

STATE REVOLVING LOAN FUND

NLC supports the current revolving loan fund but has always believed it should be a supplement to, not a substitute for, grants. While this position may be outdated, we would like to see some of the same flexibility incorporated into the Clean Water Act revolving loan fund as the Senate 2 weeks ago incorporated into the new drinking water SRF—as, for example, set asides for research and demonstration programs that assist municipalities in developing workable stormwater management programs and specified percentages of the Federal share of the SRF made available as grants to "disadvantaged communities."

NLC supports broadening the activities for which SRF loans can be used. And, we concur in your decision to permit transferability of Clean Water Act funds for drinking water purposes and vice versa.

Thank you for the opportunity to share our views with you.

PREPARED STATEMENT OF PAUL PINAULT, EXECUTIVE DIRECTOR, NARRAGANSETT BAY WATER QUALITY MANAGEMENT DISTRICT COMMISSION, ON BEHALF OF THE ASSOCIATION OF METROPOLITAN SEWERAGE AGENCIES

Mr. Chairman and members of the Committee, I am Paul Pinault, Executive Director of the Narragansett Bay Water Quality Management District Commission in Providence, Rhode Island. I appear before you representing the Association of Metropolitan Sewerage Agencies (AMSA). AMSA's members represent over 160 of the nation's largest wastewater treatment agencies (see attached list). We serve well over 90 million of the 176 million total sewered population in the United States, and collectively treat over 15 billion gallons of wastewater each day.

I am pleased to be here today to provide our perspective concerning critical municipal issues in the context of reauthorization of the Clean Water Act. We greatly appreciate the opportunity to share with you our thoughts and recommendations as environmental practitioners dedicated to improving the quality of the nation's waters.

SUPPORT FOR CLEAN WATER ACT REAUTHORIZATION

AMSA supports reform of the Clean Water Act—it's a position that we held last Congress and one that we maintain today.

You will undoubtedly hear differing views among those of us who testify before you in the coming weeks. Some will say that the Clean Water Act is not broken—so why fix it? AMSA would argue instead that the Act is, in fact, in need of reform. We can no longer rely on the command and control practices of the past to achieve the improvements we seek. But before I describe AMSA's vision of a reauthorized Clean Water Act, it's important to acknowledge how far we've come.

In 1992 the Nation celebrated the 20th anniversary of the passage of P.L. 92–500. The Federal Water Pollution Control Act was landmark clean water legislation, passed by Congress in 1972 over a Presidential veto. It was a deliberate response to mounting environmental problems and a demonstration of true Federal leadership to protect the nation's waters.

Today the Nation's clean water program is once again at a critical juncture. This time the trigger is not the environmental calamities of the early 1970's, it is instead the undeniable reality of financial constraints experienced at all levels of government.

While public support for our national clean water program remains steadfast, strong emotions exist regarding the future direction of the program and who should pay what AMSA calls "The Cost of Clean". The message is clear, and the call is for a bold, new direction for our future clean water efforts.

As the Nation considers which road to take, we should call upon what we already know. Since passage of the landmark 1972 law, we have made enormous progress toward achieving the nation's clean water goals. Today, as a result of the collective efforts of cities, States and the Federal Government, it's difficult to find a city in America where the harbor, riverfront or waterway isn't the showcase of the community. The implementation of the Clean Water Act—supported by Congress' historic strong commitment of Federal funds—has, indeed, brought enormous water quality progress.

Times, however, have changed. To comply with the Clean Water Act and State water quality standards, municipalities must move beyond the construction of secondary sewage treatment. Today's and tomorrow's challenges focus on construction to meet often costly water quality based effluent limits, combined sewer overflow controls, stormwater management requirements, sanitary sewer overflow controls, and nonpoint source controls.

Early in our national clean water program, Federal and State government contributed more than 90 percent of the funds needed to assist local communities in their efforts to clean their lakes and streams. Today, local governments shoulder more than 90 percent of the funding burden, and operation & maintenance costs and sewer rates are escalating rapidly throughout the country.

In the face of costly and complex problems and dwindling resources at all levels of government, it is no wonder that we are engaged in a debate over the future of our clean water program. But, as this debate continues, we must ask ourselves two critical questions: Are we willing to turn our backs on a clean water program that has achieved so much?, and are we willing to tell our citizens that there is no need for further protection or progress? AMSA's answer would be "Of course not." We must, instead, maintain the progress we have made and chart a future course that recognizes both the contributions made, and constraints faced, by our nation's cities in protecting water quality.

As you proceed with deliberation on Clean Water Act reform, AMSA urges you to consider the following:

The Need For Continued Federal Funding of Our National Clean Water Program

With our testimony we have included our report titled *The Cost of Clean—1994*. This report documents the fact that our water pollution control needs, as a Nation, are considerable. Emerging needs associated with combined sewer overflows, stormwater management, nutrient control, and nonpoint source control will clearly require additional funds.

As reported in *The Cost of Clean* the capital needs from 1993–1998 for 99 AMSA member agencies totals $32.4 billion. This number represents the needs of just under 100 local wastewater treatment agencies for the near-term. The Environmental Protection Agency's 1992 Needs Survey reported $145.7 billion in wastewater construction needs which includes limited estimates of CSO and stormwater control needs. It is our understanding that EPA is to conduct a new survey during 1996.

Operation and maintenance (O&M) expenses traditionally make up a higher percentage of a local agency's budget than capital costs and are paid for totally by local communities. Projected operation and maintenance expenses for 1994 among AMSA's members will total $6.72 billion annually. Based upon past surveys, we can project that O & M expenses will double every 8 years, with increases between 9 percent and 11 percent per year. AMSA's projections of debt service and operation and maintenance needs for the 1990–2010 period indicate that high costs will not diminish in the future. The increasing needs reported in *The Cost of Clean* translate directly into increasing burdens for local ratepayers.

AMSA believes that the Nation must address *both* its short and long-term infrastructure funding needs, and the need for resulting economic stimulus and growth. Reauthorization of the Clean Water Act within the 104th Congress provides an excellent opportunity to do just that.

In 1994, the administration's Clean Water Initiative estimated that a total authorization of $14.45 billion is necessary to fully capitalize the SRF program and to assure that the program fully revolves at $2 billion per year. *As a Nation, we need continued Federal funding to both fully capitalize the State revolving loan programs and bolster our efforts through grants.*

In ensuring continued Federal clean water funding, we also urge Congress to look at alternative ways to alleviate the burden on local government. In our view, that worthy goal can be achieved through a reauthorized Clean Water Act that includes a national program of comprehensive watershed management. While watershed management is not the focus of this particular forum, AMSA looks forward to providing our perspectives on this important issue at a future hearing. AMSA believes that a national program of comprehensive watershed management should serve as the backbone of the reauthorized Clean Water Act.

Integration of Wet Weather Environmental Response

A few months from now, in February 1996, AMSA's 4-day Winter Technical Conference will focus solely on the topic of "Wet Weather Flows . . . Integrating Environmental Response in Urban Watersheds." Responding effectively to the challenges presented by combined sewer overflows (CSOs), sanitary sewer overflows (SSOs) and urban stormwater management are national priorities, well-deserving of the attention you have afforded them in the context of this hearing.

Over the past year and a half, the Environmental Protection Agency has also been focused on developing solutions to urban wet weather pollution through stakeholder policy dialogs. In May, the Agency chartered the Urban Wet Weather Flows Advisory Committee to advise the Office of Wastewater Management on policy development and focus on integrating existing wet weather regulatory programs and policy. This effort has been augmented by two subcommittees, the Sanitary Sewer Overflow Subcommittee and the Stormwater Phase II Subcommittee, to provide detailed attention to regulatory and policy development for these important components of EPA's wet weather programs. AMSA has been active on each of these committees and continues to support the Agency's efforts in integrating controls on urban wet weather pollution.

Each of these issues—combined sewer overflows, urban stormwater management, sanitary sewer overflows—represents a wet weather phenomena that intermittently effects water quality, yet our Federal Clean Water Act does not coordinate these programs within the watershed context, nor have we explored the establishment of wet weather water quality standards to ensure water quality goals are met and scarce resources are not unnecessarily spent. *As you consider amendments to the Clean Water Act, we urge you to include provisions which allow the consideration* *of all wet weather phenomena in an integrated fashion and establish the mechanism to develop wet weather water quality standards, including site specific standards.*

Codification Of EPA's National Combined Sewer Overflow Control Policy Into Law

AMSA was a key stakeholder in the 2 years of regulatory negotiations that resulted in an Administration-approved National Combined Sewer Overflow Policy. The Policy allows the consideration of site-specific conditions and affords municipalities both the clear direction and the flexibility they have long needed. These key components of the Policy translate into significant cost savings as well (from $160 billion under previous proposals to $41 billion long-term investment under the Policy).

As the guidance documents that accompany the National CSO Policy have been drafted and communities have begun implementation efforts, AMSA has engaged with EPA on a cooperative agreement to identify environmentally sound performance measures for this new program. This effort builds on both the spirit and the substance of the new policy, and represents an excellent example of how future environmental policy should be established. In the coming weeks AMSA's report on "Performance Measures for the National Combined Sewer Overflow Program" will be published. We plan extensive outreach to CSO communities nationwide, and hope to build on this effort with future initiatives.

This cooperative effort to develop a reasonable and environmentally sound approach to the difficult and costly issue of CSO control has allowed for the development of programs to address this pollution source. However, the CSO policy does not reflect regulation nor actual requirements of the Clean Water Act, but instead provides guidance for EPA's regulatory program. Litigation regarding CSO requirements and the statutory deadline applicable to those requirements remains a threat under current law. *AMSA strongly urges Congress to codify the Policy by reference in the reauthorized Clean Water Act.*

Managing Urban Stormwater

An integrated environmental response to the wet weather issue of stormwater management also requires the attention of the 104th Congress. Our national program to control stormwater is clearly in need of reform. AMSA supports amendments to the stormwater management provisions of the Clean Water Act to build in consideration for cost-effectiveness and viability with regard to program implementation. We firmly believe that this can be done without compromising environmental protection and have initiated discussions with the broader municipal community to identify specific recommendations for a reauthorized national stormwater program.

A reauthorized stormwater management program should reflect a comprehensive national strategy to ensure that municipalities and industries, permitting authorities, water quality standards authorities and the public engage in a comprehensive and coordinated planning effort to achieve cost-effective stormwater management that ultimately meets appropriate health and environmental objectives and requirements. Such a program should recognize the site-specific nature of stormwater and its impacts and provide the necessary flexibility to tailor a management program to local situations. Such a program should:

(1) provide clear guidance for stormwater management practices that would be presumed to meet water quality standards;

(2) provide sufficient flexibility to local governments, especially financially disadvantaged communities, to consider the site-specific nature of stormwater and to determine the most cost-effective means of reducing pollutants and meeting CWA objectives and requirements;

(3) allow a phased approach to implementation of stormwater controls;

(4) review and revise, as appropriate, water quality standards and their implementation procedures when developing stormwater control plans to reflect the site-specific wet weather impacts of stormwater;

(5) incorporate incentives for compliance; and

(6) coordinate the development and implementation of a stormwater management program with comprehensive watershed management efforts.

We welcome the opportunity to work closely with you, Mr. Chairman, the members of this Committee and the broader municipal community to reform the stormwater management program in a manner that is both responsive to the constraints faced at all levels of government and protective of the environment.

Along with our national programs to control combined sewer overflows and stormwater discharges, a third initiative is currently underway to address the wet weather issue of sanitary sewer overflows.

Crafting Effective Responses To Sanitary Sewer Overflow Control

On July 1, 1994 AMSA wrote to EPA to express the Association's interest in responding effectively to the environmental challenges presented by sanitary sewer overflows (SSOs). At that time, AMSA urged the Agency to initiate a policy dialog, involving relevant stakeholders, with the goal of developing a consistent and effective national approach to addressing sanitary sewer overflows.

In our correspondence we expressed the belief that the path we take should be based on a clear understanding of the nature and extent of the problem, including the varied circumstances under which SSOs occur. The dialog we envisioned would take a broad approach to evaluating both the issues and options. This process is now underway.

Within the context of the dialog, there is stakeholder concurrence on two critical issues: 1) that sanitary sewer overflows in dry weather circumstances are unacceptable; and 2) that correction of wet weather overflows, even on a prioritized basis, will be costly and cannot be completed overnight.

It is AMSA's view that the reauthorized Clean Water Act should require EPA to develop a policy framework for controlling sanitary sewer overflows, in the overall context of watershed management, within 2 years of enactment. Under such a policy, EPA or a State may issue a permit for SSOs, but that permit must include a schedule for compliance through a long-term control plan, not to exceed 15 years. Clarification should also be provided that best available technology (BAT) can be less than secondary treatment.

AMSA believes that dischargers should initiate (or continue) programs to identify, report, prioritize and control SSOs. These programs should be tailored to the characteristics, financial resources, needs, and water quality and health objectives of the specific community. They should consider SSO characterization, reporting, site-specific control levels, and alternative control technologies. In any case, as a national SSO policy framework is developed, wet weather SSOs must be prioritized and controlled as necessary to protect public health and water quality.

Perhaps some "real-life" examples of how national policy plays out at the local level will help illustrate AMSA's testimony.

NARRAGANSETT BAY WATER QUALITY MANAGEMENT DISTRICT COMMISSION, PROVIDENCE, RHODE ISLAND

I want to describe our experiences specific to the control of combined sewer overflows—but before I begin I'd like to share our Clean Water Act success story with the Committee.

In the early 1980's, my agency was considered the second worst municipal pollution problem in New England. This year, as a result of the dedicated effort of many individuals—and the support of the Clean Water Act's Construction Grants Program—EPA recognized us as the best large secondary treatment facility in the entire country. This EPA award is an accomplishment that both the citizens of Rhode Island, and you Mr. Chairman, can be proud of.

The Narragansett Bay Commission, of which I am Executive Director, is responsible for the State of Rhode Island's two largest wastewater treatment facilities and approximately 87 combined sewer overflows in our district. We serve 360,000 residents in 10 communities. Included in our district are the cities of Providence, Central Falls, and Pawtucket, which have combined sewers and are typical older, urban areas of the northeast. These areas are beset by the problems of inner cities and typified by populations with low income levels. In addition, the cities have difficulty attracting industry and face escalating costs to maintain their infrastructure. The issue before us with regard to combined sewer overflows is one, most simply put, of cost.

In March 1993, the commission completed a long-term control plan for the abatement of combined sewer overflows within the district. In order to fully control these overflows and meet water quality standards, we developed a program of storage utilizing underground tanks and deep rock tunnels. Stored flows are processed at our two treatment facilities. The estimated cost of this program in 1995 dollars is approximately $500 million, with an estimated construction period of ten to 20 years. It is not inconceivable, and in fact highly probable, that the total cost for this project upon completion, will be much greater than the $500 million estimate.

I would like to put this CSO problem in perspective. Currently, our two wastewater treatment facilities handle dry weather flows of approximately 25 billions gallons per year. Over the past 10 years, we have spent approximately $100 million to rebuild both facilities to state-of-the-art secondary wastewater treatment plants. Much of the funding to make these improvements was obtained under the Construction Grants Program of the Clean Water Act, a program which has since been eliminated. The estimated volume for combined sewer overflows within the district is approximately 3 billion gallons a year or about 13 percent of the total flow of our dry weather facilities. Assuming an estimated cost of $500 million for construction of the overflow control facilities, the capital costs to treat a gallon of CSO flow would be approximately 40 times greater than for our dry weather flows. This substantial difference demonstrates that we are reaching the point of diminishing returns on expenditures of dollars for pollution control.

The impact of CSO discharges on receiving waters and their use designations must also be considered. Typically, studies have found that the most prevalent pollutants from CSOs are floatables and bacteria. For receiving waters, the sources of most other pollutants, such as toxics, nutrients and conventional pollutants (like biological oxygen demand and total suspended solids) are from dry weather facilities or loads from tributary rivers.

This finding was substantiated by the Narragansett Bay Project, a federally funded study of the Narragansett Bay Estuary. The purpose of this study was to determine the best course of action to prevent and control pollution to Narragansett Bay. The conclusion of this study was that high priority should be given to those areas where new development was affecting already clean waters. Rehabilitating the Providence River through the costly control of combined sewer overflows was a contentious issue, but one that was recommended as part of the plan, primarily because the Clean Water Act requires restoration of waters to fishable/swimmable uses. We proceed today on development of a plan that will attain uses of fishable, certainly shell-fishable, in the Upper Bay to meet Rhode Island's current water quality standards. Our concern as we proceed is that this program will move forward without the benefit of the financial support of the Federal Government.

To illustrate the experiences of my colleague, Buddy Morgan, General Manager of the Water Works & Sanitary Sewer Board of the city of Montgomery, Alabama, I offer this overview in his own words.

WATER WORKS & SANITARY SEWER BOARD, MONTGOMERY, ALABAMA

"I have personal experience in dealing with wet weather discharges from my collection system. My utility operates a sanitary collection system within the city of Montgomery and surrounding area Montgomery County and three wastewater treatment systems. As with most collection systems that have experienced numerous years of wear and tear, rainwater enters the system through infiltration in cracks in pipes. The end result is that during large rainfall events, water in excess of the collection system capacity enters the system and overflows, generally at manholes, several times a year.

"We have made extensive efforts to evaluate and remediate the problem area and develop an on-going evaluation and maintenance program to address the problem. We have ongoing a $25 million dollar expansion of our Catoma Creek Water Pollution Control Plant to assist in addressing this problem. However, we have identified capital projects requiring at least an additional $50 million dollars to address SSOs from the collection system. This large capital expenditure for our system has caused us and the Alabama Department of Environmental Management, which we call ADEM, to step back and ask the question, What are the actual water quality impacts of these overflows?

"We have conducted a water quality evaluation within the watershed receiving these overflows and determined the water quality impact of the SSOs is insignificant when compared to other major sources of pollution. These sources include urban stormwater discharges within the city and developing area of the county, and agricultural runoff. We are now in the middle of a comprehensive watershed planning effort in conjunction with participants from a wide variety of interest groups to more fully evaluate the watershed and develop a comprehensive plan to improve Catoma Creek. This is the type of effort that is required to achieve the goals of the Clean Water Act and, in many cases, this type of effort is hindered by out-dated regulatory approaches that are targeted only to specific pollution sources, such as SSOs, and not comprehensive evaluations of impacts."

Privatization of Publicly-Owned Treatment Works

Privatization of public services and infrastructure is garnering much interest nationwide as all levels of government struggle to cope with increasing funding constraints. Last week, AMSA convened a special meeting to discuss member experiences with privatization efforts, determine the ramification of the trend on our industry, and identify appropriate roles for the Association in support of our members. Over 35 municipalities from across the Nation were represented and considerable diversity of opinion existed, with a collective desire for more information about the benefits and drawbacks of privatization. There is great concern among our industry that the financial "bottom line" could take precedence over the environment and a well managed public utility. While the cost of services is certainly a factor in developing our programs, protection of human health and the environment are clearly our primary mandates. In the coming weeks, AMSA will develop a strategy to allow both the Association and its individual member agencies to effectively respond to the challenges and opportunities presented in this context.

Mr. Chairman, we concur that the issues you have identified for consideration today are well-deserving of congressional action and should be included in legislation reauthorizing the Clean Water Act. AMSA has also identified several other issues that, if appropriately addressed, will greatly improve our ability to implement the protections contained in the Act. We believe that the opportunity to make the Act more flexible and cost-effective is available and should be pursued. AMSA's list of identified issues includes but is not limited to the following priorities:

- the need for strengthened nonpoint source controls;
- acknowledgment of unique ecosystems and site-specific conditions by requiring that water quality standards for effluent and stormwater discharges in arid ecosystems be designed to protect existing ecosystems and achieve net environmental benefit; and
- ensure the protection of coastal waters through the application of site-specific, water quality-based criteria;
- clarification of the appropriate uses of biological monitoring for publicly owned treatment works and stormwater management agencies; and
- ensure the development of sound regulatory policy through the application of sound science and risk assessment.

We urge congressional action on theses priorities through the reauthorization of the Clean Water Act.

Lastly, as you work to reauthorize the Clean Water Act, we would like to ask each of you to be cognizant of the fact that publicly owned treatment works are subject to numerous other environmental statutes as well. To comply with requirements of the Clean Air Act, AMSA is currently working with EPA to develop a maximum achievable control technology (MACT) for air emissions from POTWs. We face several municipal liability issues in the context of Superfund legislation, and interstate transport legislation has, more than once, threatened to restrict the reuse of the valuable natural resource known as biosolids. The Endangered Species Act and the Safe Drinking Water Act also impact our operations. The challenges we face—as we provide a vital public service—are numerous and the constraints many. We ask that you work closely with us as each of these initiatives is considered in the 104th Congress.

We appreciate this opportunity to share the benefit of AMSA's technical and environmental policy expertise. AMSA commends you for your leadership and looks forward to working with all members of the Environment & Public Works Committee as deliberations on Clean Water Act reauthorization proceed. *We urge you to move swiftly to reauthorize this important environmental statute early next year.* This concludes my testimony. I would be happy to respond to any questions you may have.

Included with AMSA's Testimony:

- *AMSA Membership*
- *The Cost of Clean—1994 & AMSA Service Charge Index*—The Cost of Clean relates municipal funding needs to regulatory requirements. The Service Charge Index chronicles service charge increases and compares them to increases in the consumer price index over the past 9 years.
- *The AMSA Financial Survey*—The AMSA Financial Survey analyzed the responses of AMSA members to questions regarding users charges, the percentage of funds allocated to operations and maintenance, the level of debt service that POTWs have and the changing financial needs of POTWs from year to year.
- *Approaches to Combined Sewer Overflow Control: A CSO Assessment Report*—To demonstrate the many ways in which CSOs may be effectively controlled, AMSA published Approaches to Combined Sewer Overflow Control: A CSO Assessment Report. The Report, which profiles CSO control programs at 21 AMSA member agencies, provides critical information on each of the profiled programs and serves as an important technology transfer tool to guide municipalities involved in startup CSO control programs.

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Sanitation District No. 1 of Campbell & Kenton Counties, KY
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Anne Arundel County Department of Utilities, MD
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Metropolitan Waste Control Commission, MN
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City of San Antonio, TX
City of Garland, TX
North Texas Municipal Water District, TX
Central Valley Water Reclamation Facility, UT
Salt Lake City Public Utilities, UT
Alexandria Sanitation Authority, VA
Arlington County Department of Environmental Services, VA
Chesterfield County, VA
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Henrico County, VA
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PREPARED STATEMENT OF PAUL MARCHETTI, PRESIDENT, COUNCIL OF INFRASTRUCTURE FINANCING AUTHORITIES (CIFA)

Mr. Chairman, I am Paul Marchetti, Executive Director of the Pennsylvania Infrastructure Investment Authority (PENNVEST) and President of the Council of Infrastructure Financing Authorities (CIFA). It is in that latter capacity that I am here to testify today. The Council of Infrastructure Financing Authorities is a national organization composed mainly of State financing agencies and authorities, most of whom administer the financial component of the State Revolving Loan Funds for wastewater treatment. As managers of these State environmental financing programs I want to share two points with this Committee:

> One; by creating the revolving loan fund mechanism in 1987, Congress demonstrated vision in its commitment to a financing innovation. The SRFs are a unique success story with active loan funds operating in every State and Puerto Rico, making over 3,272 construction loans.
>
> Two; by its consistent failure to reauthorize the Title VI provisions of the Clean Water Act, Congress is damaging this program, sending strong signals of uncertainty to the States and the localities as to the future of the program and its continuity.

Uncertainty prevails in the program. States are unsure about the future dependability of Federal funding and how long and to what extent the Federal Government will continue to be a partner in this environmental financing effort. Communities are also uncertain about the future direction of the program and its implications for low-cost project financing. As a consequence, projects are being delayed, funds are tied-up and water quality suffers. I will provide some examples of this later in my statement.

While we have been fortunate in the past 3 years that the Appropriating Committees have acted even in the absence of authorization, there are downsides to depending exclusively on the generosity of the appropriators. Last year close to one billion dollars of money that would have gone to the SRF for allocation to all of the State SRFs was diverted into earmarked project grants. This year, as you well know, the entire appropriation is in doubt. Funding becomes hostage to reauthorization and when Congress fails to act, funds are lost, as was the case with the major rescission early this year in the water infrastructure account.

THE SRFS; A PUBLIC FINANCE SUCCESS STORY

Let me dwell first on the more positive side of my testimony. Congress can take justifiable pride in the progress and performance of the venture it initiated in 1987, with the creation of the SRF approach to clean water funding. In the area of Federal financing assistance, the SRF program is truly unique and highly successful. Since its inception, over 3,272 construction loans have been made for a total of more than $14.6 billion.[1]

Federal capital grants for the State loan funds exceed $10 billion, with an additional $1 billion added from conversion of Federal grant funds to the State loan funds. States have matched this seed money with approximately $2.4 billion of their own funds, and by leveraging, have added an additional $5.4 billion of bond proceeds, creating a total lending pool of approximately $18.9 billion. Consequently, through State match and fund leveraging, the Federal dollar contribution has been almost doubled.

The capacity to leverage the funds through debt issuance in the municipal bond market is a unique feature of the SRFs. Nearly one-half of the States are leveraging their funds, some at ratios as high as 4:1, which as the above figures indicate, substantially increases the pool of lending funds. According to survey results, States now have plans underway to leverage their funds by almost $2 billion in the next several months. In addition, several States, my own included, do not leverage the capital grant funds but do leverage other State loan funds to enhance their water quality project lending capabilities. In Pennsylvania we have pledged the repayments from 423 loans, representing over $830 million in State-originated financing, to repay PENNVEST revenue bonds. To date, we have issued $227.5 million of such bonds.

Additionally, loan repayments are beginning to flow back into the funds, demonstrating the strength of the SRFs to meet future financing needs. Thus far more than $1.1 billion has been returned to the State funds from investment earnings and loan repayments and these earnings are beginning to accelerate. In the last year payments on principal and interest totaled $723 million and should exceed one billion dollars this year. Testifying to the financial soundness of this loan program, I am pleased to report, that out of more than 3,000 loans, there has not been one delinquency in loan repayment thus far; a repayment record conservative commercial lenders would envy.

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[1] The source of all SRF related data is an Annual Survey conducted for CIFA by the Ohio Water Development Authority. The recent survey data covers the period from July 1, 1994, to June 30, 1995.

I would also point out that the preferred terms of these loans will save communities billions of dollars in interest payments. SRF interest rates range from 0 to 5.6 percent, but most are in the range of 2.5 to 3.5 percent and all are at below market rates. In the past few months 20-year General Obligation Bond have sold at about 6.25 percent. An SRF loan for $50 million at 3.25 percent, or 300 basis points below the market rate, will save the borrower $19.6 million over the 20-year period of the loan. Not an insubstantial savings.

In addition to the financial data on the SRFs, the Committee may be interested in learning of some of the programmatic progress that the SRFs have achieved in clean water funding. SRF's have been responsive to both urban and rural financing needs. Records indicate that around 31 percent of the loans have been made to communities under 3000 in population, while about 40 percent of the loans have gone to cities with over 100,000 residence. Loans are also being made to meet other water quality related problems such as storm water and combined sewer controls and nonpoint source pollution, with approximately 11 percent of the lending, thus far, for those purposes. Lending for nonpoint source control projects is on the increase, with a number of States initiating innovative approaches to remedying such water pollution problems as agricultural and ex-urban runoff, septic system correction, and groundwater contamination. Loans for nonpoint source control problems, however, can be difficult and time consuming to put together and, in any event, can require a different approach to credit analysis since you are often dealing with individual rather than community borrowers. For these reasons, the bulk of the SRF lending will continue to be for the more traditional municipal water pollution control and treatment projects. But, as the Committee knows, the need for financing in this area is enormous.

NEED FOR DECISIVE CONGRESSIONAL ACTION

Now, let me turn to the less positive side of my statement. The failure of the Congress to provide definitive direction in the area of project financing is causing confusion and delay at the State and local level. Because of uncertainties about the future Federal role and the long-term continuity of the program, projects are being delayed, costs are accelerating, and water quality is suffering. Let me give you some examples from my own State.

A number of communities across the Commonwealth for whom PENNVEST has approved funding are delaying accepting our offer pending the possibility of reauthorization of the Clean Water Act. These are communities with projects that are quite expensive relative to the users' ability to pay for them, and would benefit from the extended loan terms that have been contained in prior legislative proposals for "hardship communities". Knowing that reauthorization may allow us to offer longer loan terms, these communities are waiting to see if this will happen before finalizing any agreement with us under current terms.

One such community is Burrell Township, a community of approximately 3,000 people in Indiana County. PENNVEST approved a $3 million loan for them last March, but the local sewer authority does not want to accept it on the chance that they could get a 30-year loan if reauthorization would allow us to offer it (under our normal affordability analysis, they would qualify for such an extension). Similarly, the Jackson-East Taylor Sewer Authority, which serves 1,600 customers in Cambria County, also has a loan offer outstanding with us since last March, for the same reason. In that case, over $10 million in SRF funds is tied up. A third example is Bessemer Borough in Lawrence County, where we have had almost $7 million in funding tied up since March 1993. This community of 1,600 people (fewer than 700 customers) simply cannot afford to pay for this project without a 30-year loan term.

There are other instances of this across the Commonwealth. A fair estimate is that approximately 20 projects, representing more than $60 million in actual and potential loan officers, have been put on hold due to this one issue. In the meantime, we have funds tied up in projects that are not proceeding while others who could use these funds go without. While we wait to see what will happen in Washington, the environmental problems that require correction continue and the costs of each project escalate with time. The saddest irony of this last point is that it is the poorest communities who are waiting, hoping for a better deal, and who can least afford to pay the higher construction costs that delay will bring.

Another source of confusion that is making program administration difficult in many States is the uncertainty over the future application of equivalency requirements to SRF projects. These requirements were suspended in October 1994 when the original program authorization expired. No one knows whether any of these requirements will be reinstituted in the event the Act is reauthorized. Some States have responded by lifting these requirements for projects funded since October 1994, while others have taken a more cautious approach, electing to keep the requirements in place until the issue is resolved one way or the other. The result is that project planning and financing is inconsistent across States and uncertain within States.

For both of these reasons, as well as other, States need a decision from Washington on the future course of this program.

Finally, since the Committee has indicated interest in hearing views on the availability and advisability of more private sector participation in this area of public project financing, I can advise that CIFA supports removing limitations on the access of the private sector to SRF lending capital, so long as the facility to be financed serves the public service area and is subject to regulation by a public utility commission.

This concludes my prepared statement. I appreciate this opportunity to testify and will be pleased to answer any questions the Committee might have.

PREPARED STATEMENT OF JESSICA C. LANDMAN, SENIOR ATTORNEY, NATURAL RESOURCES DEFENSE COUNCIL, INC.

I. INTRODUCTION

Thank you for the opportunity to testify on behalf of the Natural Resources Defense Council (NRDC)[1] regarding the Clean Water Act (CWA) and the role of municipalities in addressing America's water quality concerns. While much progress has been made in the years since the 1972 CWA became law, a great deal more work remains. Forty percent of America's waters still are not safe for fishing and swimming. Sources of pollution that fall within the responsibility of municipalities—sewage treatment plants and urban stormwater—rank first, second or third as the most important sources of impairment in estuaries, rivers and lakes, as depicted in the following chart drawn from the States' own submissions to EPA:

Rank	Rivers	Lakes	Estuaries
1	Agriculture	Agriculture	Municipal Point Sources
2	Municipal Point Sources	Urban Runoff/Storm Sewers	Urban Runoff/Storm Sewers
3	Urban Runoff/Storm Sewers	Hydrologic/Habitat Modification	Agriculture
4	Resource Extraction	Municipal Point Sources	Industrial Point Sources
5	Industrial Point Sources	Onsite Wastewater Disposal	Resource Extraction

Source: "National Water Quality Inventory: 1992 Report to Congress," U.S. EPA, Office of Water, EPA 841–R–94–001, March 1994, at ES–9.

For this reason, it is essential that the current tools of the CWA intended to address remaining pollution problems be kept in place and, where appropriate, be strengthened so that we can continue our progress toward the law's goals of fishable, swimmable waters.[2]

The bad news is that water pollution from municipal sources continues to be a significant problem in many places around the Nation, resulting in water quality impairments and associated economic and public health costs and risks. But the good news is that many efforts are underway to implement the existing CWA which could bring solutions to many of these water pollution problems. Sewage pollution, runoff and stormwater pollution can be effectively addressed using practicable, cost effective approaches—if we demonstrate the political will and commit the resources necessary to do the job. Time and again we have seen that investment in cleaning up degraded waters and protecting still-clean waters can yield big dividends by rejuvenating urban areas and improving the quality of life in communities.

We ask that this Committee look with skepticism at calls for relaxation of current CWA standards and protections. Existing law, in many cases, need only be implemented fully or strengthened slightly—not rolled back—to achieve our national water quality goals.

A. Actions in the House of Representatives

Earlier this year the House of Representatives passed H.R. 961, a bill dubbed by many people in both parties (including the President) the "Dirty Water Act." The House bill, if enacted, would significantly weaken current law by, among other things, (1) eliminating the stormwater permitting program and substituting a program (modelled on the far weaker and less effectual "non-point source" management program of CWA section 319) that extends deadlines for accomplishing water quality goals 20 years or more;[3] (2) relaxing standards for sewage treatment in small towns and coastal cities without establishing adequate safeguards;[4] (3) greatly weakening the current, enforceable program for prevention and control of polluted runoff sources in coastal areas;[5] (4) undercutting consent decrees and court orders establishing timetables for cleaning up pollution from combined sewer overflows;[6] (5) relaxing a variety of provisions affecting pretreatment of industrial wastes before they are discharged to public sewers,[7] including a provision that would allow the sewage treatment plants that accept toxic industrial wastes to violate applicable water quality standards so that they can accommodate industry polluters;[8] and (6) opening the door to general degradation of water quality in urban areas through relaxation of water quality standard-setting and national technology-based controls.[9]

NRDC and other supporters of the Clean Water Act, from fishing groups to religious organizations, were dismayed by the House's action, and disturbed to note that some other interested parties, including some of the organizations represented by witnesses today, supported the House bill. Fortunately, President Clinton has promised to veto any legislation that resembles H.R. 961 if it reaches his desk.

B. Importance of the Senate's Role

We are very hopeful that, here in the Senate, under the leadership of Senator Chafee, this Committee will craft legislation that moves us forward, not backward, in our efforts to achieve clean water for all Americans. There are a number of areas in which strengthening amendments are needed to keep our progress on track, and we hope those issue areas will receive consideration.

Any legislation that emerges from this body faces a significant challenge in conferencing with H.R. 961. We are eager to work with you to strive for an end result of a stronger, more effective law. Otherwise, we would be better off with no legislation at all.

Below we offer some thoughts on the benefits of healthy waters, and then turn to the significance of key sources of municipal pollution, and approaches for preventing or controlling such pollution.

II. BENEFITS OF HEALTHY WATERS

Water-dependent tourism, fishing and wildlife observation are multi-billion dollar activities. But the real value of clean water to Americans cannot be measured only in dollars. People vote with their feet: they visit the places they care about. In 1987, Americans took 461 million trips to swim in lake and ocean waters and 220 million trips for motor boating.[10] In 1985 they took 870 million trips for fishing, and over 30 million trips just to visit these waters.[11] In 1993, there were over 180 million visitors to ocean, bay and Great Lakes beaches.[12] All told, in a nation of approximately 250 million, people take over one and a half billion trips to enjoy the water each year—an average of six trips per person.

This country's future is linked to the health of its waters. As noted above, Americans depend on clean water for all types of recreation. But clean water is not only a leisure time pursuit. When choosing a place to live, *Money* Magazine's annual poll in 1995 reported, clean water ranked *No. 1*—above crime and schools—as the reason for selecting a location.[13]

We also depend on clean water and healthy aquatic ecosystems as sources of food and jobs. There is no one number that accurately reflects the economic importance of our water resources or how much of the gross national product is based on activities depend on clean water. But many figures do reflect how much Americans value their waters.

For example, coastal tourism is a multi-billion dollar activity. The value of coastal tourism in just a few States is remarkable:[14]

State	Dollar value
California	$38.0 billion
Florida	21.6 billion
New Jersey	12.1 billion
Hawaii	10.44 billion
Puerto Rico	1.7 billion
Texas	$4.6 billion
Georgia	1.4 billion
Pennsylvania	138.0 million

Fisheries are also a multi-billion dollar activity. In 1993, the value of U.S. marine fish landings amounted to $3.5 billion. Consumers spent $38.1 billion for fisheries products and the marine fishing industry contributed $19.8 billion of value added to the U.S. Gross National Product in 1990.[15] One-quarter of U.S. adults fish for pleasure; they spent $28 billion to do so in 1985.[16] Shellfishers, mostly in the South, spent another $2.3 billion.[17]

Apart from the specific dollar values that can be assigned to clean water, the benefits of these resources include intangible improvements in the quality of life. One shining example of recouping a water resource given up for lost is the Boston Harbor cleanup, which has led to a major rejuvenation of the Harbor area and a recreational fishing renaissance that few would have predicted possible only a decade ago. A recent article in the Boston Herald (copy attached to this testimony) noted that in 1 year the Harbor cleanup had helped to generate 6,000 direct and indirect new jobs, and also noted:

- A fifty percent increase in pleasure boating traffic at a local marina since 1983;
- Fishermen pulling striped bass and bluefish from dockside and nearby waters;
- Children cooling off every afternoon at a downtown Boston beach in 'the clearest water in years'
- Ferry rides to an island in the Harbor featuring beaches with snorkeling and kayaking
- New harbor activities featuring lobster boats, sport fishing and commercial vessels.[18]

In fact, the remarkable recovery of Boston Harbor has led to discussions of creating a national park on the 31 islands in the Harbor.

Many communities around the Nation can tell revival stories like that of Boston Harbor; in many cases the stories' endings have not yet been written, because restoration efforts are still in early stages. (A recent EPA-funded survey by the Center for Watershed Restoration identified fifty urban watershed restoration projects underway throughout the Nation aimed at bringing degraded areas back to life and improving water quality and habitat.)[19]

Clearly, the existing tools of the CWA and other water protection laws, like the Coastal Zone Act Reauthorization Amendments' (CZARA) nonpoint program, are making a difference. The challenge is to encourage further progress through adequate resources and flexibility—without compromising on environmental and human health protection goals. As we discuss below, restoration is still needed in many areas and the law's current tools must be utilized and strengthened to complete the task.

III. CONTINUING WATER QUALITY CONCERNS TRACEABLE TO MUNICIPAL ACTIVITIES AND LAND USES CALL FOR A ROBUST CWA

A variety of sources of pollution that originate with municipalities continue to cause problems, particularly in densely populated urban coastal areas. Publicly owned treatment works, stormwater, combined sewer overflows and separate sewer overflows each play a role.

A. Publicly Owned Treatment Works (POTWs)

America has made a significant investment since 1972 (at the State, Federal and local levels) in installing and upgrading sewage treatment facilities. This investment in POTWs has paid off; the most recent EPA Needs Survey reported that seventy percent of the population was served by sewage treatment facilities as of 1992,[20] compared to only forty-two percent in 1970.[21]

But the task is far from over. First, another 17 percent of the population remains without basic sewage treatment infrastructure deemed necessary under EPA's standards. Second, increasing (and better understood and documented) stresses on America's waters have led to a need for more advanced treatment in many cities.[23] Third, POTWs remain significant dischargers of toxic water pollution: in 1992, the most recent year for which data are available, they ranked as the No. 1 source of impairment in estuaries, No. 2 in rivers and No. 4 in lakes.[24] POTWs can contribute excessive nutrients (nitrogen and phosphorous) that result in low oxygen levels, as well as toxic pollutants that reach the POTWs from "indirect" industrial discharges and from commercial and homeowner uses.

While major improvements have been made in the control of toxic pollutants discharged to POTWs by industry, EPA's 1993 Toxic Release Inventory (TRI) reported that 314,350,915 pounds of reportable toxics still were being released to POTWs.[25] An additional analysis (performed by EPA at Congress' behest[26]) of the most likely areas of significant sediment contamination in America's waterways predicts that releases from POTWs are likely to account for a significant share of sediment contamination sites and levels of concern.[27] In fact, POTWs were found to be the dominant category of dischargers in the priority watersheds of concern. The reason: POTWs continue to accept discharges from industry of pollutants that pass through the treatment works and contaminate sediments in receiving waters. Because the current water quality-based permitting system does not account for sediment impacts (requiring only that levels of toxic pollutants in the water column meet applicable standards, whereas certain contaminants can settle out of water and accumulate to far higher levels in sediment), we are not yet adequately focused on the long term in-place contamination problems that can result from continuing POTW releases—and industrial, stormwater and polluted runoff releases—of such substances.

Unquestionably, America needs to continue to strengthen the control of toxics reaching POTWs. This means a continuing commitment to implementing an enforcing the pretreatment program, through which industry dischargers—not consumer ratepayers—shoulder responsibility for preventing or controlling the toxic pollutants in their wastestreams. We also must continue to invest in our sewage treatment infrastructure. For example, the 1992 EPA Needs Survey identified an increase in the documented need for advanced levels of wastewater treatment—beyond the minimum secondary treatment levels required of all POTWs by the CWA—from $5.5 billion in 1988 to the $15.5 billion in 1992.[28]

The estimated costs of our total infrastructure needs remain daunting. Based on data submitted by the States, and on EPA's and the States' models and estimates, an additional $137.1 billion or more is still needed to address the full range of water quality protection needs.[29] (That figure principally reflects the costs of traditional "point source" infrastructure, such as sewage treatment plants, collector and interceptor sewers, and combined sewer overflows; the dollar needs for polluted runoff and stormwater activities have not yet been fully documented or modelled.)

1. State Revolving Loan Fund

The Natural Resources Defense Council supports continuing Federal investment in the State Revolving Fund at levels adequate to achieve our water quality goals and meet the requirements of the Clean Water Act. We also support the use of SRF moneys for a wider array of water protection needs, such as stormwater, polluted runoff and wetlands and estuary restoration projects that are part of approved comprehensive conservation and management plans (CCMPs) under Section 320 of the CWA.

It is worth noting that, as of November 1995, the annual survey conducted by the Council of State Infrastructure Financing Authorities (CIFA) found that SRF funds overall were being repaid at a faster rate than they were being used to make loans.[30] In addition, the majority of States had not yet taken action to leverage their SRFs to increase the available pool of funds for loans to municipalities.[31]

These facts suggest that we have not yet maximized the potential benefits from the SRF. Undoubtedly, as experience with the program grows we will see even greater benefits from the program.

Expansion of the types of needs eligible for the SRF also might be appropriate. For instance, we believe Congress should explore the potential for broader SRF funding of municipal stormwater programs through changes to the current funding restrictions. Operation and maintenance activities now ineligible for SRF funding, are for many municipalities the heart and soul of their stormwater cleanup efforts—but are qualitatively very different from traditional operation and maintenance functions at municipal sewage plants. Congress should evaluate what, if any, of them should be considered for SRF eligibility.

2. *Privatization of Sewage Treatment Plants*

The resources still remaining in the SRF also indicate that we have the time to deliberate and to move cautiously in considering other municipal and State revenue-generating mechanisms, such as the sale to private companies of sewage treatment infrastructure assets that were built largely with Federal grants. Privatization of municipal assets raises a number of issues that deserve a more robust public debate than they have received thus far. Among the questions that should be aired: (1) Should the Federal Government recoup the value of any undepreciated part of the asset? (2) If not, then to whom should the proceeds go? The State revolving fund, or the community's ratepayers, or the public agency? (3) Should privatized treatment works that are functioning in the same capacity as they were when publicly owned be subject to identical regulatory requirements as their public counterparts? For example, are private treatment works routinely to become eligible for the Domestic Sewage Exclusion under the Resources Conservation and Recovery Act? (And what about a new class of privately owned treatment works providing identical services that we can expect to see developing?) How will pretreatment requirements and public access to information such as effluent data and reports be enforced? (4) What safeguards are in place to protect ratepayers if homeowner sewage treatment services, generally a natural monopoly, are handled by a private company? Will State public utility commissions set rates? Are they ready for the task? (5) Would private ownership of sewage treatment plants be likely to increase pressure to weaken water quality standards and permit limits? (6) Has the Federal Government (or anyone else) done adequate analysis to determine how a fair price for such assets should be established? The communities that own POTWs may be ill equipped to assess fair market values when there has never before been a market place for these unique assets.

We ask that this Committee conduct a far more detailed inquiry into these issues before including any privatization provisions in a bill.[32] Public employees should be consulted as part of the inquiry process.

3. *Enforcement of the Clean Water Act at POTWs and Elsewhere*

Two bills have been introduced by Senator Pressler, S. 1390 and S. 1391, addressing enforcement issues at publicly owned treatment works and respecting private entities. We have some important concerns about each of the bills, and look forward to working with Senator Pressler and this Committee in attempting to address these concerns.

a. Supplemental Environmental Projects

S. 1390, the "Local Environmental Improvement Facilitation Act," would allow a private person assessed a civil penalty under the Clean Water Act to use the amount of the penalty up to $500,000 to fund a community environmental project, rather than pay the penalty directly into the Treasury. In principle, we very much support this concept. When NRDC has brought citizen suits against polluters, we have frequently supported the courts' exercise of equitable powers to fashion just such arrangements in communities that have been injured by pollution.

However, there are a few elements in S. 1390 that should be revised to avoid key concerns of citizens in communities harmed by pollution. First, as drafted the bill does not allow for any role for citizen plaintiffs[33] in selecting or overseeing supplemental environmental projects. As Congress, EPA and the Department of Justice frequently have noted, citizen suits are a key means for deterring and halting violations of environmental laws. Citizen plaintiffs should have a formal role in determining appropriate projects and overseeing compliance with agreements to carry out such projects in instances in which they are parties to the lawsuits.

Second, violators should not reap tax advantages by paying to finance deductible community environmental projects rather than paying civil penalties—which are not deductible—to the Federal treasury. The bill should specify that the payments to any supplemental environmental project are made in after-tax dollars, to equalize the "bite" of the project expenditure in relationship to a penalty payment.

Third, the bill may create an inadvertent loophole by failing to limit environmental projects to actions not otherwise required by law. Polluters should not be able to charge otherwise-required expenditures against an account to remedy a CWA violation.

Finally, we suggest, based on past experience with such projects, that the requirement that the project be carried out within a "city or county" be broadened to allow the project to be within a fifty-mile radius of the locus of the violation. This will enable a community to select a project that falls within the affected watershed even if political boundaries do not follow the natural hydrology.

In sum, all of these concerns with S. 1390 are easily addressable through minor language changes and we would be happy to work with the Senator to achieve a proposal we could support.

b. Local Government Violations of the CWA

S. 1391 (introduced by Senators Pressler and Campbell) proposes to prohibit the imposition of penalties against units of local government for violating the CWA when a compliance plan is in effect. The principle appears to be that, once a municipality signs on to a compliance plan to correct past violations, it should not have to pay penalties while working toward achieving the overall requirements of the plan.

We are highly skeptical about this proposal. The threat of further liability often can be an important spur for a local government to stick to a compliance plan. Already the courts have equitable authority to waive penalties during the term of a compliance plan, if appropriate. By *prohibiting* impositions of such penalties in some circumstances, that flexibility is curtailed.

As currently drafted the bill could open a number of loopholes. First, it could be read as applying retroactively—i.e., once a compliance plan is entered into, a local unit of government may be relieved of liability for *past* violations. This appears to be inconsistent with Sen. Pressler's intent,[34] and we hope could easily be clarified.

Second, like S. 1390, we are concerned that citizens' access to the courts might be undercut if local governments can enter into compliance agreements that are not the equivalent of a compliance order—enforceable under a court's injunctive authority which a citizen litigant also could invoke. We are aware of instances in which a citizen has filed (as required under the CWA) a 60-day advance notice of intent to sue a local government, and the local government has entered into a weak consent agreement with the State that preempts the citizen's right to take legal action. These abuses could be more common if the local units of government could further insulate themselves against civil penalties.

Third, because the bill contains absolutely no time limit on compliance timelines eligible for the penalty exemption, it is an invitation to delay. We strongly recommend that the exemption, if it is to be established at all, be strictly time limited to only 1 year with, perhaps, one 6 month extension in extenuating circumstances.

Finally, by relying on proof of "good faith" determinations by the Administrator or the Secretary of the Army (in sec. 404 actions), S. 1391 makes waiving the penalty exemption far more complex and difficult. We suggest that compliance with the plan—not good faith attempts to comply—be the test of eligibility for any exemptions from penalties.

In short, we would prefer that this bill not be included in any Senate CWA package in its current form. We would be happy to work with this Committee to fashion a more narrow provision aimed at giving all communities stronger incentives to achieve CWA requirements.

B. Urban Stormwater

Seen from the perspective of the receiving waters, urban stormwater is not a benign "cleansing rain." It is a polluted "cocktail" containing toxic metals, oil and grease from vehicles; pesticides from lawns and parks; disease-causing microorganisms, and high levels of sediments and nutrients. Stormwater becomes polluted when rain water and snow melt come into contact with contaminated road surfaces and parking lots, pet waste, rooftops and industrial or commercial sites where polluting materials are left out in the open. In urban areas natural filtration processes (whereby rain soaks through soil and contaminants are trapped or biologically degraded) are disrupted because so much of the ground area is covered by impervious surfaces—pavement or buildings. The high level of imperviousness also increases the sheer quantity and speed of stormwater runoff; channelized stormwater can rush through streambeds "scouring" away natural bottom vegetation and/or eroding stream banks. Thus, significant increases in flooding also occur when stormwater is not properly managed or increased flows are not prevented.

Nutrients in stormwater can over-enrich water bodies and lead to eutrophication and low levels of oxygen that harm fish and aquatic plants. An NRDC analysis of highly rated stormwater management programs in two Maryland counties in the Chesapeake Bay watershed found that, even when fully implemented, stormwater controls currently required would merely slow the increase in nutrients entering the Bay and would never achieve the forty percent reduction in nutrient loadings called for by the multi-State Chesapeake Bay Agreement.[35]

The levels of toxic pollutants in stormwater can be surprisingly high. In a series of NRDC studies of urban areas' stormwater releases, we found that stormwater rivalled or exceeded sewage plants and large industrial facilities combined as a source of damaging pollutants like lead, zinc, cadmium and copper.[36]

In light of these facts, it should come as no surprise that urban stormwater runoff is the No. 2 source of impairment in America's estuaries and lakes, and the No. 3 impairment source in our rivers.[37] Stormwater pollution caused at least 345 closings of coastal and Great Lakes beaches in 1994, according to a survey of State and county governments conducted by NRDC.[38] In addition, stormwater pollution together with sewage pollution from malfunctioning sewage treatment plants and combined sewer overflows continues to cause bacterial contamination of shellfish beds at significant rates. The National Shellfish Register[39] shows that, in 1990, less than two thirds of our shellfish waters were approved unconditionally for harvest. The contamination rate is highest in the Gulf of Mexico and along the Pacific coast, where only about one half of waters are approved.[40]

1. Status of the Program

Under the 1987 amendments to the CWA, Congress mandated that EPA take a tiered approach to tackling the problem of stormwater pollution.

The law required that, in Phase I, industrial stormwater dischargers and municipalities of 100,000 or more obtain stormwater permits (that could be issued on a system- or jurisdiction-wide basis) that include requirements to effectively prohibit non-stormwater discharges into sewers and reduce the discharge of pollutants to the maximum extent practicable.[41] Other dischargers causing or contributing to a significant water quality problem also fall under Phase I.

Phase II dischargers—*i.e.*, all other small municipal and commercial stormwater dischargers—were exempted from permitting requirements until October 1, 1992 (later extended by the Congress to October 1994).[42]

The Phase I rules for permit applications were promulgated in 1990[43] and were revised in 1992 following a legal challenge by NRDC.[44] Since then implementation has proceeded for larger cities and heavy industry; we will discuss below the remaining issues and concerns of stakeholders involved with Phase I.

The status of Phase II is more complicated. Under the 1987 CWA amendments EPA was charged with conducting a study of stormwater not covered in Phase I, to determine the extent of pollution problems and to establish procedures and methods to control such discharges "to the extent necessary to mitigate impacts on water quality."[45] The deadline for the EPA study passed; the 6-year permitting moratorium and extensions expired, and still the study and the Phase II rules were not completed. Small municipalities feared that they could be held liable for failure to get permits, despite EPA's failure to supply them with rules saying what was expected of them.

Seeking resolution of these issues, NRDC sued EPA once again.[46] On April 7, 1995 a consent decree was filed in which EPA agreed to issue a rule extending to August 2001 the deadline for all dischargers under Phase II (except those causing an immediate water quality problem, for whom a 180-day notice would be given) to submit a permit application. EPA also published the study required under the CWA, and agreed to propose and promulgate rules by 1999 that will spell out application requirements for all sources required to obtain permits and/or abide by other stormwater management programs, all of which are mandated by the CWA.[47] In other words, Congress granted, and EPA is utilizing, wide flexibility to develop a tailored, appropriate stormwater program for Phase II sources, and under this Decree EPA can use its flexibility fully.

2. Implementation of Phase I

Phase I of the urban stormwater program is up and running. It represents a significant investment of time, money, and creativity on the part of local, State, and Federal Government officials and their private-sector partners. This program has had a wide variety of positive benefits for the 758 local governments that are permittees under Phase I—i.e., cities and counties of 100,000 and above their associated contiguous smaller municipalities, and industrial dischargers.[48] Benefits range from significant reductions in illicit discharges of harmful chemicals, to improved coordination between disparate government agencies, to reduced pathogen loadings, and reduction of flood damage risks due to improved system maintenance.

Although local stormwater and water quality officials acknowledge the problems with the stormwater permitting program and suffer from inadequate Federal funding assistance to bolster local programs, many nonetheless are positive in their assessment of its overall benefits. As one local official put it in a talk of May 1994,

> Montgomery County, Maryland, is pleased that NPDES permitting rules have been issued to regulate stormwater discharge impacts on water quality. Promulgation of these requirements have forced municipalities to take

a hard look at their water management programs to assess their adequacy for protecting local streams. This self evaluation is leading to new and expanded water program initiatives in Montgomery County that are designed to improve the management of nonpoint source pollution and runoff quantity impacts.[49]

The municipal stormwater program has frequently been cited as an unfunded mandate. We do support greatly increased Federal financial support for this program, but already communities with stormwater permitting programs have found the money to undertake significant clean-up programs. They have looked to local, State, and Federal[50] sources. Programs are funded successfully in hundreds of communities through local and regional stormwater utilities. For instance, in Ann Arbor, Michigan, stormwater fees for a typical single family residence are about $9.00 per quarter—a reasonable fee that annually raises over a million dollars for the community's stormwater program.[51]

Besides Ann Arbor and Montgomery County, support for the Federal stormwater program has been echoed by local officials from coast to coast, ranging from Austin, Texas to Santa Clara County, California. Of course, this support is tempered with constructive criticisms, many of which we agree with, that suggest the need for administrative improvements to the Phase I program.[52] We are working to resolve the equity, legal, administrative and fiscal challenges in the program cooperatively with all stormwater stakeholders through a variety of EPA-sponsored negotiating forums in which all interested parties have a voice. From these forums we hope spate of positive reforms will soon result.

PHASE I CONCERNS

NRDC's focus on the resource damages caused by urban stormwater has not blinded us to the very real challenge municipal stormwater officials face in implementing the permitting and other stormwater programs. We find several of the common criticisms of the NPDES stormwater program to be valid and compelling, namely:

- paperwork burdens, particularly those associated with permit applications, must be reduced;
- onerous, costly, and often less-informative chemical stormwater monitoring should be reduced, while more cost-effective, targeted monitoring, especially biological monitoring, should receive more attention.[53]

These two problems relate to the need for a considered reduction in certain federally imposed regulatory burdens. The other flaws in the current program, in contrast, suggest the need for a more active Federal role in funding and overseeing the stormwater program:

- the overall *lack of Federal support* for municipal stormwater programs, including gaps in Federal research and demonstration projects; technical assistance and transfer efforts; cost-sharing for local program establishment, and training of local stormwater staff should be corrected.
- Gross *inequities* between the States related to variations *in the scope of municipal involvement* should be overcome. Whereas some States, notably Florida, California, Georgia, Oregon and Alabama, have taken pains to ensure that all municipalities within larger urban regions are included in "regional" or "watershed-wide" stormwater permits, most States, including those in the Northeast and Midwest, have only included the largest incorporated municipalities in their permit programs. The result is a gross inequity in the level of effort from State to State—an inequity that only a strong Federal program can remedy.
- Gaping holes in the *enforcement* of current stormwater permits. Significant enforcement gaps, particularly in the general permits for construction sites, exist and have been reported to NRDC from observers in Texas, Georgia, and Ohio. In rapidly growing regions of these States, where the need for a strong government role in preventing construction site erosion from killing local waters is most crucial, we have received reports of weak-to-nonexistent enforcement by all levels of government. Since local and State officials are often unable or unwilling to enforce construction erosion control permits, a strong Federal program is needed.
- *Lack of public access to information*—particularly facility stormwater management plans and reports of monitoring results—make public involvement and oversight extremely difficult. EPA can remedy this information gap through changes in the rules.
- The status of two categories of dischargers was left up in the air following NRDC's successful legal challenge to EPA's Phase I rule: construction sites of 5 or fewer acres, and "light" industries with "no exposure" of polluting materials

to rainfall. Both of these categories are folded into the stormwater negotiations, discussed further below.

3. Implementation of Phase II

The principal concern of municipalities and others potentially subject to the Phase II stormwater program has been their legal liability to comply with the CWA in the absence of any permit application rules or other clear signals as to what is expected of them—apart from concerns about what the agency's permit requirements might be. As explained in subsection 1 above, EPA's April 7, 1995 rule delayed by 6 years the date on which Phase II dischargers will be required to submit permit applications. The preamble also makes clear that, during that period, EPA will propose and promulgate permit application rules that may narrow the universe of people required to submit applications.

During the intervening 6 years EPA has convened a multi-party task force to craft consensus recommendations on the Phase II program. NRDC is participating actively in these negotiations along with representatives of cities, small towns, commercial interests and States, to agree how best to structure the Phase II program.

We strongly believe that the complexity of stormwater pollution demands this type of open, inclusionary dialog that gives voice to all the parties who ultimately must administer and live with the program. Thanks to the ambitious mandate of the 1987 CWA amendments, tempered by subsequent experience and rulemaking, all parties have a continuing incentive to achieve consensus in time to meet the 1999 rulemaking deadline and the 2001 permit application deadline. Without question, these deadlines help to keep the negotiations on track.

We do not believe that the problems with the stormwater program warrant a massive legislative overhaul; to the contrary, we believe that the repeal of the NPDES stormwater program, as proposed in H.R. 961, would reverse the positive momentum now underway to find creative local and regional pollution prevention solutions.

PHASE II CHALLENGES: WATER QUALITY STANDARDS AND EFFLUENT LIMITS IN PERMITS

Larger cities subject to Phase I permit requirements, and those potentially subject to Phase II program requirements, have frequently expressed concern that stormwater permits should never be subject to numerical effluent limits and should never require dischargers to achieve compliance with water quality standards. To a certain extent this issue is a red herring. We are not aware of any Phase I municipal stormwater permits that require compliance with chemical-specific numeric limits, nor have we advocated that such permits be written. The U.S. EPA does not require nor promote the use of numeric effluent limits for municipal stormwater permits.

Furthermore, to our knowledge, no municipality has been subjected to a requirement to attain in-stream water quality standards immediately, or even within a single 5-year permit term. There is great variability in the nature of stormwater problems, and in many if not most cases we may need a longer time horizon than 5 years for meeting ambient water quality standards. Also, the watershed approach to integrated pollution prevention requirements for all contributing sources of pollutants of concern is necessary, since most "urban" watersheds are not wholly "urban," but contain rural and agricultural land uses as well. Thus, the relationship between municipal stormwater programs, and ambient water quality standards, must be a looser, non-traditional relationship, set on a longer time-frame when compared with traditional point source permits.

We have an excellent model for this non-traditional approach, namely the consensus-based Combined Sewer Overflow Policy discussed in subsection C below. We are eager to hammer out a correspondingly flexible but enforceable and ambitious approach for achieving water quality goals, and therefore we oppose attempts to completely sever municipal stormwater permits from water quality standards attainment. Without water quality standards as the ultimate yardsticks for program performance, and as the ultimate objectives for restoring urban watersheds, how will these programs be accountable to the public for achieving meaningful results? Water quality standards, the backbone of the Clean Water Act, are the most appropriate, objective yardsticks and goalposts for stormwater programs.

As Phase II negotiations proceed under EPA's leadership, we can envision achieving broad based consensus about a far narrower universe of smaller cities that would come within the NPDES permitting umbrella. The present potential list, which could consist of as many as 19,000 municipalities, perhaps should be narrowed down to 400 Census Urbanized Areas containing about 3,000 incorporated places (many of which could be covered by systemwide, watershed-wide, or other innovative, streamlined permitting approaches). This is a fiscally responsible approach, because it ensures that we save money by preventing pollution today through focusing stormwater prevention approaches on the most rapidly growing urbanizing areas.

In the Phase II discussions we also will be striving for a consensus on setting verifiable performance standards in order to ensure fairness and effectiveness in the application of stormwater pollution prevention measures. Such performance standards would attach to each measure, whether it be "used oil collection and recycling" or "retrofitting flood control ponds for stormwater pollutant removal." The National League of Cities has expressed a view, at least informally, that this approach is reasonable. Indeed, *we* believe that the Phase I program badly needs to contain some performance standards, as well.

Performance standards will ensure an adequate and equitable level of effort from city-to-city in stormwater abatement programs. This is a far cry, however, from advocating that municipalities "fund costly facilities to collect and treat stormwater flows," as some have claimed. We support use of cost-effective stormwater measures that are within the financial means of local governments.

PHASE II CONCERN: SCOPE OF COVERAGE FOR NON-MUNICIPAL SOURCES

Some of the myriad industrial, commercial and construction sources who are potentially eligible for coverage under the Phase II program—whether through individual permits or through some other undetermined program—would like the Congress to exempt them permanently and peremptorily. We urge the Senate not to do so. EPA's Phase II negotiators plan to use the findings of the detailed EPA study of stormwater pollution and sources that Congress requested to fashion a streamlined program that is practical, targeted and cost-effective. If known categories of stormwater pollution sources were exempted at this stage of the discussions, the entire effort could be undercut. Congress's 1987 directive is now working well, and we urge that it not be derailed.

One example of a complex issue to be resolved through negotiations is the status of a number of "light industry" sectors that EPA had exempted completely from the program, an approach rejected by the Ninth Circuit and remanded to EPA. Now we are preparing to reach agreement on how to *selectively* exempt such industries based on some demonstration that they have protected from rain exposure areas of their sites where polluting activities occur. Total impervious surface area is also being taken into consideration. Through this consensus-building process, we are seeking creative solutions. We are confident that these problems will be well-addressed by EPA's multi-stakeholder groups who are now charged with resolving them.

In summary, we are committed to working with municipalities, States, the private sector, grassroots environmental groups, and EPA in seeking constructive administrative solutions to the program's problems, and in charting a wise course for Phase II that tackles the remaining significant unaddressed stormwater sources. We do not believe that the solution is to throw the baby—the Phase I and II stormwater programs—out with the "bathwater," as the House bill would do.

C. Combined Sewer Overflows (CSOs)

In many older American cities, combined sewer systems carry both "sanitary" sewage (human waste plus industrial waste discharged to sewers) along with stormwater. During rainfall events these systems often overflow, dumping a combination of untreated sewage, industrial wastes and contaminated stormwater into rivers, lakes and estuaries. Combined sewer systems exist in about 1100 communities, and have as many as 15,000 overflow points; these systems cover about 43 million people.[54] Almost 85 percent of them are located in 11 States in the Northeast and Great Lakes: Maine; Massachusetts; Vermont; New Jersey; New York; Pennsylvania; West Virginia; Illinois; Indiana; Michigan, and Ohio.

CSO discharges contain all of the pollutants present in stormwater and discussed above. But to this "cocktail" are added the other contaminants associated with sanitary sewage: untreated (raw) human sewage (including 'floatables' and solids); bacteria, viruses and other pathogens at extremely high levels; oxygen sapping pollutants; high nutrient levels, and the toxic pollutants that are contained in the industrial wastestreams routed to the sewage treatment plant for final treatment but diverted instead through overflow points during rainfall events.

CSOs, like stormwater, cause significant problems for water-dependent recreational and commercial enterprises. For example, 16 percent of the shellfish bed closures and limitations in the North and Middle Atlantic are caused by combined sewer overflows.[55] Combined sewer overflows caused over 194 closings and advisories at U.S. beaches in 1994.[56] These overflows are responsible for over 36 percent of impaired shoreline miles (that have been assessed) along the marine coasts in America.[57] Closer to home here in Washington, combined sewer overflow discharge points pour raw sewage into the waters of Rock Creek, in the city's own National Park, every time it rains.

The costs of CSO abatement are significant. The 1992 EPA Needs Survey estimates a tab of $41.2 billion between now and 2012.[58] As discussed above, the impacts of CSO discharges also are significant. Literally billions of tourism dollars per year may be lost when CSOs close popular beaches in densely populated urban areas.[59]

Combined sewer overflows are "point sources" under the CWA, subject to technology based standards like industrial discharges (rather than to secondary treatment requirements like sewage treatment plant discharges) under a court decision rendered in 1980.[60] They also are subject to water quality-based CWA requirements.

Although the 1980 Court of Appeals decision made clear that CSOs were required to meet technology-based standards, there was no Federal guidance as to what those standards should be. This led to many years of delay in addressing the significant public health and environmental risks of CSOs.

Finally, in the early 1990's, EPA's Assistant Administrator for Water convened a multi-stakeholder "Management Advisory Group" to hammer out a consensus among stakeholders on how to tackle the CSO problem in a practical, cost-effective fashion. The group ultimately achieved this goal and made specific recommendations to the Office of Water; those recommendations were formally adopted by EPA in a "Combined Sewer Overflow (CSO) Control Policy" in 1994.[61]

The policy's objectives are to ensure that, if CSOs occur, they happen only during wet weather; to bring all CSO discharge points into compliance with the water quality- and technology-based requirements of the CWA, and to minimize impacts on water quality, human health and aquatic ecosystems. The policy recognizes the need for a phased approach (putting highest risks first); for clear standards of performance with adequate flexibility to take into consideration local variability; and for the potential need to review and revise water quality standards based on field experience with CSO correction.

Under the policy all permittees with CSOs are required to undertake immediately nine minimum controls, with full implementation by no later than January 1, 1997:

1. Proper operation and regular maintenance programs for the sewer system and the CSO;
2. Maximum use of the collection system for storage;
3. Review and modification of pretreatment requirements to assure CSO impacts are minimized;
4. Maximization of flow to the POTW for treatment;
5. Prohibition of CSOs during dry weather;
6. Control of solid and floatable materials in CSOs;
7. Pollution prevention;
8. Public notification to ensure that the public receives adequate notification of CSO occurrences and CSO impacts; and
9. Monitoring to effectively characterize CSO impacts and the efficacy of CSO controls.

In subsequent phases permittees will develop and implement programs that achieve compliance with water quality standards, recognizing that the process will take a number of years and that priority must be given to discharges that are likely to impact sensitive areas (where contact recreation occurs, for example). EPA, for its part, has spelled out its intention not to seek civil penalties for past violations from communities that are complying proactively with the CSO policy. In other words, all State and local resources will go to implementing public health and water quality protections and not to paying fines.

NRDC was a participant in the consensus-building discussions that resulted in the CSO policy, and we support it. We would have no objection to the codification of the CSO policy in the CWA as a component of any reauthorization as proposed in S. 1114 in 1994, although we do not consider it necessary.

H.R. 961, the House bill, also included a CSO policy codification provision. Unfortunately, the provision included a section specifically undercutting the timetables for action in existing court-ordered CSO compliance schedules. We strongly oppose that provision and would urge that it be omitted from any Senate bill.

Based on the success of the CSO policy development effort, EPA is following a similar approach in the area of stormwater (discussed above) and separate sewer overflows (see below in section D). We are pleased to be participating in these multi-stakeholder negotiations and hope that equally practical, common sense agreements will be achievable.

In NRDC's experience, it was the ambitious mandate of the CWA, and the desire of all participants to achieve compliance with that mandate, that drove the CSO negotiations to their positive conclusion; had Congress acted to loosen requirements, the negotiations would not have succeeded. We urge this Committee to consider that dynamic as a CWA reauthorization is developed.

D. Separate Sewer Overflows

About 138 million Americans in 18,500 municipalities are served by separate sanitary sewers (*i.e.*, stormwater and sanitary sewage are carried in separate pipes with the sanitary sewage—at least in theory—carried to the treatment plant and the stormwater discharged directly to surface waters).[62] In some cases, separate sanitary systems can overflow with raw sewage and industrial wastes flowing directly into streets or into basements of homes. A survey conducted by the Association of Metropolitan Sewerage Agencies (AMSA) found that, in the majority of cases, these sanitary sewer overflows (SSOs) occurred at manholes.[63] At times residential or city streets may be filled with raw sewage and floatables, exposing children and others to disease and toxic pollutants.

Like CSOs, SSO discharges contain high levels of bacteria. NRDC found, in 1994, that SSOs actually caused more beach closings than CSOs—324 versus 194 for CSOs.[64] However, *un*like CSOs, in general the problem of sanitary sewer overflows may be one not of designed and deliberate overflow but instead one of inadequate maintenance and operation of the sewer system. For example, excess infiltration of water into the sewer system through cracks and leaks may cause backups that lead to SSOs. Inadequate cleaning of sewers can cause them to occur.[65]

As with stormwater policy, EPA has convened a multi-stakeholder panel to try to resolve key policy issues on SSOs. Environmental organizations (including NRDC), State officials, the National League of Cities and the Association of Metropolitan Sewerage Agencies (AMSA) are among the participants. This group is seeking to resolve questions about appropriate enforcement approaches; minimum national performance standards for operations and maintenance (to avoid overflow events); public notification to prevent unnecessary exposures and health risks; how best to eliminate dry-weather—and unequivocally prohibited—SSOs, and a response planning process that considers a variety of system repairs, upgrades and capacity expansion in order to achieve water quality objectives.

As with stormwater, we believe that the EPA-sponsored discussions can and will lead to broad-based agreement on how best to tackle this issue. Legislation is not needed at this time. If agreement is attained and revisions to the law are needed to implement consensus recommendations, we would then ask the Congress to consider taking action.

E. Needed Strengthening Changes for the CWA

As this testimony has indicated, through a concerted focus on implementing existing law we can still make a great deal of further progress in meeting water quality goals. Nevertheless, there are areas in which we believe a stronger mandate from the Congress to take action against pollution would spur results. A few of these areas bear directly on municipalities, and we discuss them briefly below.

1. Beach Water Quality, Monitoring and Closure Standards

For the past 5 years NRDC has been gathering data from local and State health departments and other officials on water quality monitoring at public beaches in the Great Lakes and coastal States. Our findings have been distressing. We have found a patchwork of State and local requirements that do not systematically and adequately protect public health.

Although EPA has water quality criteria for pathogens in beach water, these standards are not stringent enough. They allow for 19 in 1000 swimmers to become ill from a day of swimming. Moreover, many States and localities have not adopted standards equivalent to EPA's criteria, and/or use monitoring techniques that are inadequate. A number of States do no beach water quality monitoring at all. Finally, not all States close or post advisories at contaminated beaches. Altogether, we have consistently found that (1) many beaches are closed due to unsafe conditions, and (2) we have reason to suspect that many more beaches should be closed because the conditions indicate that contamination is likely to be present even though no monitoring is conducted.[66]

If the Clean Water Act is reauthorized, we urge that Congress call for a comprehensive national system of beach water quality standards, monitoring requirements and posting/closure requirements to replace the inadequate and inconsistent State and local patchwork we have today. People have a right to know if they are placing their health and their children's health at risk from a day at the beach. Moreover, once people learn of the extent of beach water contamination—often caused by municipal sewage treatment plant problems, stormwater and combined or separate sewer overflows—they will better understand the urgent need for cleanup.

2. Fish Contamination Standards, Monitoring and Posting Requirements

As with beach water quality, today we have a national patchwork of programs for monitoring and reporting fish contamination. A 1989 EPA study of State fish consumption advisory practices showed extreme variations among States in the methods used to evaluate risks and report them to the public. There was variability in monitoring; the portion of fish evaluated (e.g., fillets vs. whole fish); pollutants and testing procedures; assumptions about rates of consumption, and the decision to issue—and how to post—fish consumption advisories.[67] Unhappily, despite this patchwork, many areas of the Nation are subject to fish consumption limitations. According to a newly developed EPA data base, over 1500 U.S. water bodies are currently under advisory, representing about 14 percent of the nation's total lake acreage, and 4 percent of the nation's river miles.[68] This represents a 20 percent increase in the number of advisories compared to 1993.[69] In addition, the Great Lakes and a large portion of U.S. coastal waters are also subject to advisories.[70]

Congress should call on EPA to develop and implement a national baseline program for the monitoring and evaluation of fish tissue safety, and should establish notification and posting requirements to protect public health. These standards should take into consideration the special needs of sensitive populations—those who eat an unusually high amount of fish due to cultural or economic reasons, and those who are particularly sensitive to toxic exposures, such as pregnant or nursing mothers and young children.

3. Sediment Quality Criteria

Although EPA has the legal authority to establish and enforce sediment quality criteria for toxic contaminants of concern, the agency has failed to take expeditious action to issue these criteria. In the absence of national baseline criteria, which establish targets for cleanups for both point sources and runoff sources of contamination, we will continue to lose ground in our efforts to prevent or control ongoing contamination. Congress should direct EPA to propose and issue sediment quality criteria, on an expeditious basis, for the toxic sediment contaminants that ranked highest in the recently issued National Sediment Contaminant Point Source Inventory for their toxicity and ubiquity.

CONCLUSION

The Clean Water Act continues to be a successful law from which we reap only a fraction of the possible benefits due to incomplete or inadequately funded implementation. Congress' continued support for Federal funding to operate the Environmental Protection Agency and the States' water programs, as well as its continuing support for a strong and comprehensive law, are essential to preserving our health and our aquatic wealth.

ENDNOTES

1. The Natural Resources Defense Council is a non-profit national organization with over 170,000 members and supporters. NRDC is dedicated to the protection of public health and our natural resources. Since enactment of the 1972 Clean Water Act (CWA) NRDC has been actively involved in the implementation and enforcement of many major CWA programs of concern to municipalities, including stormwater, combined sewer overflows, pretreatment sludge quality and polluted runoff under both—the CWA and the 1990 Coastal Zone Act Reauthorization Amendments (CZARA).
2. CWA Sec. 101(a)(2) establishes this goal; it was to have been attained by 1983.
3. Sections 101(a) and 322 of H.R. 961.
4. Section 309 of H.R. 961.
5. Section 1001 of H.R. 961.
6. Section 407 of H.R. 961.
7. Section 311 of H.R. 961 allows publicly owned treatment works (POTWs) to waive national pretreatment standards. Section 304 of H.R. 961 blocks the enforcement by States or EPA of limits on the toxicity of a sewage treatment plant's "whole effluent"—an important mechanism for assuring that aquatic life in the receiving water body is adequately protected from adverse effects of the discharge.
8. Section 312 of H.R. 961 creates a special loophole for silver dischargers (mostly targeted at the photo processing industry) that allows them to escape effluent limits even if their silver discharges result in the sewage treatment plant violating applicable water quality standards.

9. Sections 302 and 303 of H.R. 961 create loopholes that would allow 'backsliding' from current pollution prevention and controls already in place, and authorize or even encourage States to weaken water quality standards and goals based on economic considerations. In addition, section 306 of H.R. 961 postpones for 20 years the States' obligation to complete the analyses of water quality problems in areas impaired by multiple sources (often urban areas) necessary to achieve compliance with water quality standards.

10. R. Sampson & D. Hair, *Natural Resources for the Twenty-First Century*, Am. Forestry Ass'n (1990) at 261.

11. U.S. Fish and Wildlife Service, *1985 National Survey of Fishing, Hunting and Wildlife Associated Recreation* (1988) at 14, 44. 0

12. NRDC, *Testing the Waters IV: the Unsolved Problem of U.S. Beach Pollution* (August 1994) at 7.

13. *Money* Magazine, "The Ten Best Places to Live" (Sept. 1995), based on poll conducted by Roper/Starch Worldwide.

14. NRDC, *Testinq the Waters V; Politics and Pollution at U.S. Beaches* (June 1995) at 21.

15. U.S. Dep't of Commerce, National Oceanic and-Atmospheric Administration, National Marine Fisheries Service, *Fisheries of the United States*, 1993 (May 1994) at iv, v.

16. EPA, *Clean Water and the American Economy* (1992) at–14.

17. NOAA, *Recreational Shellfishing in the United States* (1991) at 2,11.

18. "Cleanup Created New Jobs," Boston *Herald* (Attachment 1; see also Attachment 2, "In the swim in the harbor," Boston *Globe* editorial (Aug. 11, 1995).

19. "1994 Edition: National Directory of Urban Watershed Restoration Efforts," Center for Watershed Protection Silver Spring, MD. A map and list of the watershed restoration projects is attached to this testimony (Attachment 3).

20. EPA, *1992 Needs Survey Report to Congress* (September 1993) at 2.

21. Council on Environmental Quality, *Twenty-First Annual Report* (1990), at 303, 309.

22. EPA estimates that, when all needs are met, 87k (rather than the current 70 percent) of the population—250-million people—will be served by treatment facilities. (Projection year: 2012). U.S. EPA, *1992 Needs Survey Report to Congress* (September 1993) at 2.

23. EPA, *1992 Needs Survey Report to Congress* (September 1993) at 9. Documented needs for advanced (tertiary) levels of treatment jumped from 5.5 billion in the 1988 survey to $15.5 billion in 1992.

24. EPA, *National Water Quality Inventory, 1992 Report to Congress* (March 1994), at ES–9.

25. EPA, 1993 Toxics Release Inventory: Public Data Release (March 1995) at 19. Because the TRI data base omits smaller generators of releases and a vast number of toxic chemicals, it undoubtedly understates the quantities discharged to POTWs; nevertheless it is a useful benchmark. POTWs do not currently report their own releases under the Toxic Release Inventory. There has been discussion about expanding the inventory to include them as reporting facilities. EPA-will propose a rule (expected in April 1995) to expand TRI coverage, and we hope that it will include a proposal to cover POTWs so that we can obtain a more complete picture of the sources and releases of toxic pollutants to all media.

26. EPA, *National Sediment Contaminant Point Source Inventory: Analysis of Release Data for 1992*, Final Draft, Office of Water (March 22, 1995) . The study and report were mandated by the Water Resources Development Act of 1992.

27. The National Sediment Contaminant Point Source Inventory identified POTWs as a significant category based on data from the Permit Compliance System, EPA's data base that tracks permittees under the CWA, and the Toxic Release Inventory. EPA also identified inorganic chemical producers, petroleum refineries, organic chemical manufacturers and several others as significant sources. Contamination potential as reported in this study is subject to many caveats; however, it serves as a useful beginning point in establishing priorities for prevention, enforcement and other policymaking decisions.

28. EPA, *1992 Needs Survey, Report to Congress* at 9.

29. This figure is based on needs eligible for funding under the State Revolving Fund (SRF) provisions in Title VI of the CWA. Certain other costs, such as operations and maintenance costs for stormwater management, are not eligible for SRF moneys and thus are not included in this estimate. See EPA's 1992 Needs Survey.

30. *1995 Annual SRF Survey, November 30, 1995*, by Steven Grossman, Executive Director, Ohio Water Development Authority (for the Council of Infrastructure Financing Authorities) at 5.

31. Twenty-one States had leveraged their SRF funds as of June 30, 1995, according to the CIFA survey (at 3) cited above.

32. H.R. 961, the House bill, contains such a provision already (section 603(i)). The House bill overrides all other provisions of the CWA to authorize the sale of treatment works, and specifies an order of reimbursement. It calls for EPA to review and revise all rules to "eliminate any obstacles" to construction and operation of treatment works by the private sector. This clearly would open the door to private sewage treatment plants being built in future, as well as purchases of existing plants.

33. There are many instances in which citizens initiate actions against polluters and the State or Federal Government steps in and files suit during the 60-day waiting period prescribed by CWA Sec. 505(b). In such cases, citizens have signalled their direct interest and should have a seat at the table in deciding on and overseeing a remedy.

34. In introducing S. 1930 Sen. Pressler stated that, under the bill, "local governments would stop accumulating . . . penalties once a municipal compliance plan has been negotiated . . .". 141 Cong. Rec. No. 173. No retroactive effect is implied. The bill could be revised to clarify this point.

35. Cohn-Lee, R. and Cameron, D., "Urban Stormwater Runoff Contamination of the Chesapeake Bay: Sources and Mitigation," *The Environmental Professional*, 1992, Vol. 14, at 10–27.

36. NRDC conducted these analyses, called "Poison Runoff Indexes," using widely accepted estimating techniques that take into consideration density, imperviousness and estimates of pollutant loadings associated with urban runoff. Indexes were prepared for Harrisburg, PA; Washington, DC; Tidewater, VA; Atlanta, GA; Los Angeles, CA and Cleveland, OH.

37. EPA, *1992 Water Quality Inventory, Report to Congress* (March 1994) at ES–9.

38. NRDC, *Testing the Waters V: Politics and Pollution at U.S Beaches* (June 1995) at 3. NRDC has conducted an annual survey of beach closures and advisories for 5 years; 1995 is the first year for which the survey included analyses of the sources of pollution responsible for the beach closures and advisories. Unfortunately, it is not possible to analyze trends in the overall *number* of advisories and closures, because factors like monitoring and reporting practices and weather conditions (which influence water pollution) are not consistent from year to year.

39. National Oceanic and Atmospheric Administration (NOAA), *The 1990 National Shellfish Register of Classified Estuarine Waters* (1991) at 5.

40. For a more detailed discussion, see Adler *et al.*, *The Clean Water Act 20 Years Later* (Island Press, 1993) at 48–54.

41. CWA sec. 402(p).

42. The Water Resources Development Act, P.L. 102–580, Oct. 13, 1992, extended the moratorium on permitting Phase II sources to Oct. 1, 1994.

43. 55. Fed. Reg. 47990 (Nov. 16, 1990).

44. *NRDC* v. *EPA*, 966 F.2d 1291 (9th Cir. 1992); 57 Fed. Reg. 60444 (Dec. 18, 1992).

45. CWA Sec. 402 (p)(5).

46. *NRDC* v. *Browner*, Civ. No. 95–634 PLF D.C. D.C.

47. CWA sec. 402(p)(6).

48. EPA, Office of Water, Presentation on the Report to Congress (on the Status of Phase I and the study of potential Phase II sources) to the Stormwater Phase II Policy Dialogue, Dec. 6, 1995.

49. Weigand, *et al.*, "Adapting Municipal NPDES Stormwater Discharge Permit Requirements to Also Address Local Needs: Montgomery County, Maryland's Experience and Program Direction." Paper presented to the George Washington University Seminar on Wet-Weather Flows, May 31, 1994, at 9.

50. Some elements of stormwater programs are eligible for SRF dollars, such as reviewing and developing new laws and rules, training, public education, and equipment purchases. Under current law operating costs are ineligible. The CIFA survey of SRF activities reports a total of $11,483,000 in SRF loans since 1992. See *1995 Annual SRF Survey* at Chart 14.

51. Apogee Research, Inc. (1994) Benefits of Storm Water Management: Case Studies of Selected Communities. prepared for U.S. EPA, Office of Water. Draft Final Report, April, 1994, at 33.

52. NRDC was joined by elected municipal officials in Montgomery County, MD, Austin, TX, and Portland, OR, in a recent letter to the Senate supporting keeping the current stormwater program intact and EPA's consensus-building process for Phase II. See Attachment 4.

53. For an excellent description of the problems with the chemical monitoring approach, and the benefits of the biological approach from a local official's perspective, see Wiegand *et al.* (1994) op cit.

54. EPA, *Combined Sewer Overflow Policy*, Office of Wastewater Enforcement and Compliance (1994).

55. *Id.*

56. NRDC, *Testing the Waters V: Politics and Pollution at U.S. Beaches* (June 1995) at 3.

57. EPA, *Combined Sewer Overflow Control Policy* (summarizing 1990 Water Quality Inventory data) (1994).

58. EPA, *1992 Needs Survey, Report to Congress* (1993), at 14.

59. *Testing the Water V: Politics and Pollution of U.S. Beaches* (June 1995) at 20–21.

60. *Montgomery Environmental Coalition v. Costle*, 646 F.2d 568 (D.C. Cir. 1980).

61. 59 Fed. Reg. 18688 (April 19, 1994).

62. EPA, *1992 Needs Survey, Report to Congress* (1993).

63. *Separate Sanitary Sewer Overflows: What Do We Currently Know?* Association of Municipal Sewer Authorities, January 1995

64. NRDC, *Testing the Waters V: Politics and Pollution at U.S. Beaches* (June 1995) at 3.

65. G.E. Peterson, M.J. Miller, S.R. Goodwin, C. Shapiro, *Guide to Benchmarks of Urban Capital Condition* (The Urban Institute Press, 1984).

66. See *Testing the Waters V: Politics and Pollution at U.S. Beaches* (June 1995). *Testing the Waters I–IV* also document this ongoing problem.

67. *See* Adler *et al.*, *The Clean Water Act 20 Years Later* at 132 to 135, and sources cited therein.

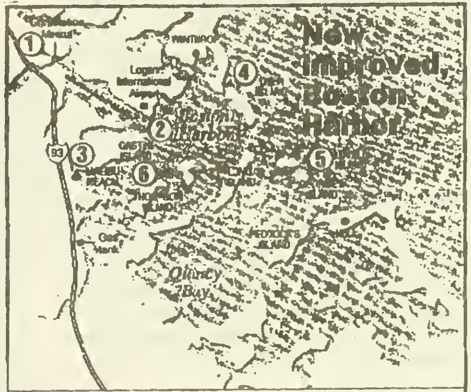
68. EPA, *National Listing of Fish Consumption Advisories* (July 21, 1995) Summary Data.

69. *Id.*

70. *Id.*

ATTACHMENT 1

BOSTON HERALD



1 – Constitution Marina: 50 percent increase in pleasure boating traffic registered since 1993.
2 – Castle Island: Fisherman pulling in striped bass and bluefish from the dockside and nearby waters.
3 – Malibu Beach: City children cooling off every afternoon in "the clearest water in years."
4 – Deer Island: $184 million state-of-the-art sewage treament plant dedicated and on-line last week.
6 – Lovell Island: $5 ferry trip offers beaches, snorkeling and kayaking – without the Bourne Bridge backups.
6 – The Shell: Seafood rich mid-harbor dropoff where lobster boats, sports fishermen and commercial vessels converge.

Cleanup created new jobs

If there's a silver lining to the billions spent undoing the damage to Boston Harbor, it's in the jobs created by the cleanup and the job potential created by the greater cleanliness.

According to MWRA estimates, last year the Boston Harbor Project pumped $500 million into the local economy and helped generate 6,000 direct and indirect new jobs.

Many went to workers building the sewage-treatment installation on Deer Island, and to offshoot businesses like the new fertilizer plant at the former site of the Fore River Shipyard in Quincy.

Others jobs have sprung up thanks to the cleaner, fresher-smelling waters of the harbor itself, which have attracted tourists, newer Boston residents unfazed by the harbor's grim history, and even a few hard-core Bostonians.

"I see bass jumping out there like you wouldn't believe, and the area now smells like the ocean, not an outhouse," said Greg Dolan, new assistant director at Piers Park sailing club, a recently built MDC dock with rentable 23-foot Sonar sailboats.

"I'm from Eastie, and we lost out a lot of quality of life on the airport, but people down here are a lot happier now with the harbor for sure," he said.

Although tightly regulated due to past problems with pollution and overfishing, lobstering and pogie-netting have returned to the mid-harbor waters.

Game fishing for blues and stripers on charter vessels has also started coming back, although the potential right now far outstrips the demand.

Industrial life is reawakening along the harbor as well, leading to plans to dredge the inner Harbor to provide access for large container vessels.

This idea alarms citizens groups like "Save the Harbor/Save the Bay," whose members remind planners at every opportunity that there is still eight to 10 feet of a "mayonnaise-like mix of sludge and heavy metal" along the harbor floor, although it is now somewhat encapsulated by a foot-deep "scab layer" of normal ecological debris.

"That is horrible stuff, and if they dredge here it will be churned up like nobody's business," warns Bruce Berman of Save the Harbor. "Now, we're very much in favor of economic development, but this has to be handled very delicately, and that means it will be expensive to do."

Berman says he is hopeful that the harbor's recent near-death experience will cause industrialists to think long and hard about cooperating with environmentalists before they proceed.

"We want to do this with them, but we won't compromise our harbor's progress," he says. "Basically, we're here to stay." ☐— TOM MASHBERG

ATTACHMENT 2

The Boston Globe

FRIDAY, AUGUST 11, 1995

In the swim in the harbor

Surf's up at M Street Beach! The clarion call to swim in Boston Harbor, which once prompted only snorts of incredulity, is being met increasingly by happy splashers who have learned what harbor-watchers have been saying for years: On most days, Boston's waters are eminently fishable and swimmable. Tomorrow the fourth annual harbor swim to benefit the advocacy group Save the Harbor/Save the Bay will flutter-kick off at 1 p.m., with 150 swimmers expected to make the mile course from Carson Beach to M Street.

The swimmers will compete for trophies offered by Jantzen, the swimwear company, which is sponsoring the event, and all participants get a T-shirt and beach towel for their $25 entry donation. They will also get bragging rights to use around friends who haven't rediscovered Boston's waters and don't know that the wakes of boats are no longer brown but are white again, that bluefish and stripers are running, that porpoises return every spring to the inner harbor, that the state has spent $30 million improving the beaches.

All of this has been lovingly documented by Save the Harbor/Save the Bay, which monitors the $3.5 billion harbor cleanup project. Members tirelessly promote protection of both the harbor and its shores, with a volunteer Baywatchers program to report environmental violations and advocate improved access on the land.

The Massachusetts Water Resources Authority will soon release its annual state of the harbor report. It is likely to show continued improvements in water clarity and plant and animal life and a decrease in the toxicity of sediments. Since the MWRA halted dumping of untreated sludge into the harbor in 1991, underwater vision has improved by 2 feet. Rockweed, the familiar "pop it" seaweed, is thriving, an indicator of biological diversity, which means the harbor bottom is healing.

The resilience of the harbor after enduring so many environmental insults is an inspiration, and everyone who pays an MWRA water bill can take pride in it. That's reason enough to join tomorrow's celebration at the Curley Recreation Center.

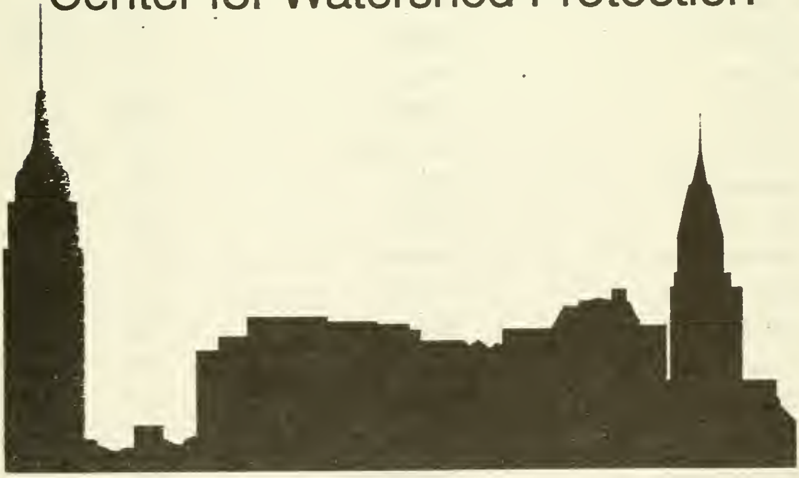
ATTACHMENT 3

1994 Edition

National Directory of

Urban Watershed Restoration Efforts

Center for Watershed Protection

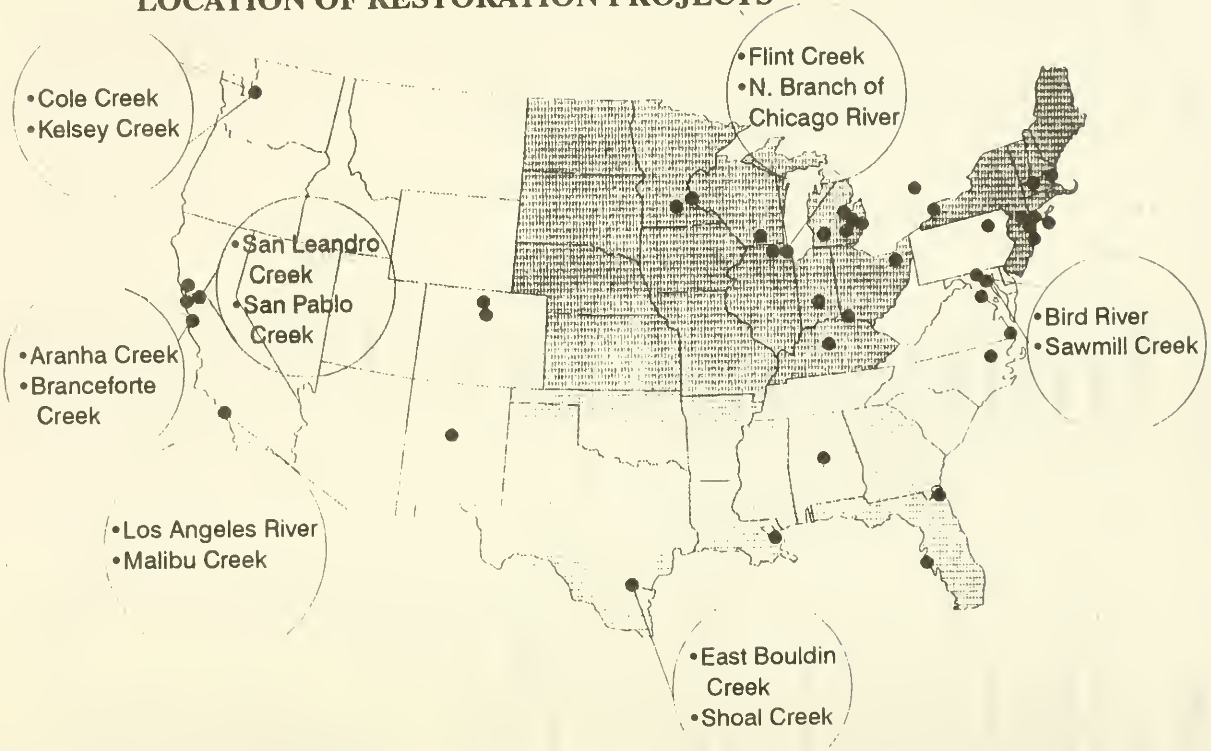


LIST OF PROGRAMS CONTAINED IN DIRECTORY

WATERSHED	CITY	STATE
Anacostia River	Washington	DC
Aranha Creek	Santa Cruz	CA
Bear Grass Creek	Frankfort	KY
Bird River	Baltimore	MD
Boquet River	Elizabethtown	NJ
Boulder Creek	Boulder	CO
Branceforte Creek	Santa Cruz	CA
Bronx River	Bronx	NY
Buffalo River	Buffalo	NY
Cahaba River	Birmingham	AL
Cannon River	Faribault	MN
Clinton River	Sterling Heights	MI
Cole Creek	Bellevue	WA
Coyote Creek	Alviso	CA
Don River	Downsview, Ontario	CANADA
Dupage River	Wheaton	IL
East Bouldin Creek	Austin	TX
Elizabeth River	Norfolk	VA
Flint Creek	Chicago	IL
Green River	Greenfield	MASS
Huron River	Ann Arbor	MI
Kalamazoo River	Allegan	MI
Kelsey Creek	Bellevue	WA
Lackawanna River	Scranton	PA
Lake Ponchartrain	Metairie	LA
Longwell Branch	Westminster	MD
Los Angeles River	Los Angeles	CA
Malibu Creek	Topanga	CA
Menominee River	Madison	WI
Merrimack River	Wilmington	MA
Middle Rio Grande	Albuquerque	NM

WATERSHED	CITY	STATE
Mill Creek	Cincinnati	OH
Myakka River	Sarasota	FL
North Branch Of The Chicago River	Chicago	IL
Passaic River	Baskira	NJ
Petaluma River	Petaluma	CA
Pigeon House Branch	Raleigh	NC
Rouge River	Detroit	MI
San Leandro Creek	Oakland	CA
San Pablo Creek	Oakland	CA
Sawmill Creek	Baltimore	MD
Second River	Sandy Hook Highlands	NJ
Shoal Creek	Austin	TX
South Shore Of Staten Island	Corona	NY
St. Croix River	Hudson	WI
St. Johns River	Jacksonville	FL
Swan Creek	Saginaw	MI
Thompson River	Loveland	CO
Upper Cuyahoga	Akron	OH
White River	Indianapolis	IN

LOCATION OF RESTORATION PROJECTS



ATTACHMENT 4

October 2, 1995
The Honorable John H. Chafee
506 Dirksen Senate Office Building
Washington, D.C. 20510-3902

Dear Senator Chafee:

Because you value our country's waters and the contribution they make to the quality of life and economic vitality of our communities, the undersigned, including municipal officials and environmental group representatives, urge you to continue our nation's forward progress in reducing stormwater pollution. We are writing to ask you to maintain the basic stormwater program established in the 1987 Federal Water Pollution Control Act Amendments, and to inform you of several recent developments that have eliminated much of the perceived need for legislative changes in the Act by protecting smaller cities from liability.

Urban stormwater is one of our most critical remaining "frontiers" in water pollution prevention. Our nation has made tremendous progress in reducing sewage and industrial wastewater discharges. Stormwater, however, which rivals sewage plants and factories as a source of heavy metals, nutrients and other pollutants in many regions of the country, remains "at large" -- uncontrolled and unmitigated in too many urban areas.

In addition to its high quantities of toxic and oxygen-robbing pollutants, stormwater's high bacteria levels cost our nation's coastal communities billions of dollars per year due to closed and restricted shellfishing waters and bathing beaches. According to EPA's National Water Quality Inventory, compiled from the States' own watershed health surveys, stormwater from urban areas is now second only to municipal sewage plants as a source of damage to our estuaries; second only to agriculture as a source of lake pollution; and our third largest source of river impairment nationwide. (Enclosed is a fact sheet that you may find helpful.)

A widespread consensus exists, among environmentalists, municipalities and private business leaders, on the need for reasonable and cost-effective stormwater pollution control. We agree that a reasoned, careful fix for the administrative problems in the current stormwater permitting program is needed. However, this fix does not require the creation of a new statutory framework; a sound framework already exists in the Clean Water Act. Responsible municipal officials have worked hard to tailor the existing stormwater program to local needs and goals and strongly support continued, improved efforts within this framework, as we go "up the learning curve" on stormwater prevention techniques.

The U.S. Environmental Protection Agency agrees with the need for administrative improvements to the stormwater program, and has established several policy advisory councils to craft these changes. The councils consist of a broad array of municipal, business, state, tribal, environmentalist, and industry representatives, and are working diligently to further a national consensus on the future of the stormwater program. The twin goals of EPA's "wet weather" advisory councils are to fix the problems with the existing program, and to shape the course of future stormwater management efforts in a whole-watershed context, as the first step in a binding six-year process worked out in a consent decree with NRDC.

Although small cities and other stormwater sources have expressed concern about the potential need for immediate permitting under the current deadlines, EPA issued a rule establishing that it will not require permits from the small cities and other potential sources for the next six years. In other words, small cities and other sources are not expected to get permits, or be subject to enforcement actions for six years.

Recent legislation on the House side, notably H.R. 961, the "Dirty Water" bill, ignores this consensus, casting it aside in favor of a rash approach that would dismantle the whole stormwater program and replace it with an offspring of the nebulous, unfocused and ineffective state nonpoint source programs. We urge you to oppose any stormwater legislation resembling the House Bill's attempt to throw away, rather than fix the problems with. this basically sound stormwater program. Please make sure that legislation on the Senate side builds on the groundwork already laid for stormwater pollution prevention; do not roll back a good program that is crucial to both the environmental and the economic health of our nation's communities.

Sincerely,

Derick Berlage

Derick Berlage
Council Member
Montgomery County Council
Montgomery County, MD

Mike Lindberg

Mike Lindberg
Commissioner
City of Portland
Portland, OR

Roy C. Hengerson
Board of Directors
Sierra Club

Pierce Flynn

Pierce Flynn, Ph.D.
Executive Director
Surfrider Foundation

Jackie Goodman
Jackie Goodman
Council Member
Austin City Council
Austin, Tx

Femi Adesanya
Dr. Babafemi A. Adesanya
Environmental Justice Information Center
Hampton, VA

Michael S. Hirshfield, Ph.D.
Michael S. Hirshfield, Ph.D.
Director, Ecosystem Protection Program
Center for Marine Conservation

Tim Searchinger
Tim Searchinger
Environmental Defense Fund

Mike Houck
Michael Houck
Urban Naturalist
Audubon Society of Portland
Portland, OR

Brigid Shea
Brigio Shea
Council Member
Austin City Council
Austin, Tx

Ted Morton
Ted Morton
Coastal Protection Coordinator
American Oceans Campaign

Diane M Cameron
Peter Lehner
Diane Cameron
Peter Lehner
Water and Coastal Program
Natural Resources Defense Council

E. Ansel Strickland
E. Ansel Strickland
President
Cahaba River Society
Birmingham, Al

Natural Resources
Defense Council
NRDC

40 West 20th Street
New York, New York 10011
212 727-2700
Fax 212 727-1773

January 26, 1996

The Honorable John Chafee
Chair, Committee of Environment and Public Works
U.S. Senate
Dirkson Senate Office Building, Room 410
Washington, DC 20510

Dear Senator Chafee:

At your Committee hearing on December 13, 1995 concerning municipal issues and the Clean Water Act, Jessica Landman of the Natural Resources Defense Council (NRDC) testified that there were many communities implementing innovative, affordable, and effective stormwater pollution prevention programs. You requested that we provide you with information concerning such municipalities.

Below we provide the requested information. For clarity, we have tried to synthesize the various programs into six categories of activities that municipalities have successfully undertaken. The innovative strategies range from site design to public education to financing mechanisms. The referenced articles that are not otherwise easily available to you are attached in a separate appendix to this letter.

The following material is, of course, only a sampling of the available literature concerning pollution prevention techniques (as well as some treatment methods) that are economically feasible and effective. Indeed, EPA bibliographies of selected storm and combined sewer pollution control technical documents contain over 400 references (and note that these "comprise a fraction of the research performed").[1] In addition, EPA's Guidance to municipalities concerning the NPDES stormwater permit application, [2] as well as the "g-guidance" issued by EPA and the National Oceanic and Atmospheric Administration[3] and numerous other governmental and private manuals, [4] provide both broad and detailed suggestions for stormwater pollution prevention methodologies.

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[1] U.S. Environmental Protection Agency (EPA), Office of Research and Development, "Bibliography of Storm and Combined Sewer Pollution Control R & D Program Documents" (Jan. 1995) (listing 344 technical reports); U.S. EPA, Risk Reduction Engineering Laboratory & Office of Water Enforcement and Permits, "Storm and Combined Sewer Pollution Control: A Compilation of Significant References" (May 1991) (listing approximately 100 reports).

We believe the following examples demonstrate that there are effective and affordable solutions to municipal stormwater problems.[5] Since municipal stormwater is one of the largest causes of degradation of this country's estuaries, lakes, oceans and wetlands,[6] poses a significant threat to many declining water supplies,[7] and can be effectively controlled, it is crucial that the Clean Water Act not be amended to eliminate the current enforceable stormwater program.

Although the examples we provide below are not an exhaustive compendium of municipal stormwater management efforts nationwide, the twenty or so municipal and county programs we highlight demonstrate some of the stormwater leadership in cities and counties in all regions of the country. The inspiring reality of effective action is in sharp contrast to the grim picture of inability often heard in congressional testimony.

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[2] U.S. EPA, Part II Guidance for Municipal Stormwater Permit Application.

[3] U.S. EPA, Office of Water, Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters (January, 1993).

[4] R. Horner, J. Skupien, E. Livingston & H.E. Shaver, Fundamentals of Urban Runoff Management: Technical and Institutional Issues (Terrene Institute, Aug. 1994).

[5] We do not assert that in all cases an environmental professional could specify before the fact precisely which stormwater treatment system will guarantee the attainment of numerical water quality standards by a municipal separate storm sewer system -- an issue raised by other witnesses before the Committee. However, such an ability is not required by the Clean Water Act nor necessary to continue to move the stormwater program forward.

[6] U.S. EPA, Office of Water, National Water Quality Inventory; 1994 Report to Congress, Executive Summary, ES-15, ES-19, ES-25, ES-29 (December 1995) (finding based on state data that urban stormwater is the leading cause of estuarine impairment in the country and either the second or third largest source of lake, ocean and wetland impairment).

[7] Robbins, et al., Effective Watershed Management for Surface Water Supplies, American Waterworks Association Research Foundation, 170, 186 (1991) (a survey of 272 water supply watersheds which found that agricultural and urban land uses were the two most important sources of pollution to drinking water supplies); Rizzo Associates & CH2MHill, "The Watershed Protection Plan for Wachusett Reservoir Watershed, "Metropolitan District Commission (January, 1991) (finding urban runoff a significant threat to Boston's drinking water supply).

It is NRDC's position that the Clean Water Act's NPDES program provides an effective framework to ensure that all relevant municipalities undertake the same type of stormwater pollution prevention and control effort that many progressive and forward thinking municipalities already have. Many cites have moved on their own to prevent stormwater pollution and improve the quality of life of their citizens; however, many have not. The NPDES program ensures that stormwater pollution prevention is implemented competently and publicly by all those municipalities covered.

I. Summary of Findings

As demonstrated below, many communities have already implemented a wide range of effective, innovative and financially reasonable stormwater pollution prevention programs. By far the most effective stormwater control is runoff prevention incorporated early into site design and town planning. At very little cost, over 75% of stormwater pollution can be prevented by careful design. Similarly, well-enforced local construction ordinances have been found to significantly reduce the generation of stormwater pollution at little cost. Many municipalities have also found that simple measures such as increased public education, enforcement of existing standards (such as those governing septic system maintenance, littering or hook-ups of industrial or residential drains to storm sewers), and improved system maintenance produce high reductions in pollution at very low cost. Finally, contrary to much of the rhetoric heard, stormwater pollution prevention programs enjoy broad public support, are affordable, and have been financed in innovative and effective ways. Perhaps most important, many communities have realized that stormwater control, which at its best occurs through better site design and maintenance, drastically improves the quality of life of city residents and saves money in the long term.

The information below, drawn from dozens of sources and representing the efforts of many innovative communities throughout the country, thus refutes the claims that stormwater management is not a problem, that we do not know how to control stormwater, that stormwater management is prohibitively expensive, and that stormwater prevention technologies are ineffective. With a little effort -- and the flexibility currently provided in the NPDES stormwater program -- urban stormwater pollution can be prevented or reduced effectively, affordably and promptly.

II. Innovative, Effective and Affordable Municipal Stormwater Control Programs

A. Stormwater Prevention Site Design, Planning, and Research

Prevention-based stormwater measures incorporated early into the design process, including through local ordinances, can achieve high rates of flood prevention and stormwater pollution control at very low cost. This is particularly true in developing areas such as the rapidly growing suburbs and urban fringes.

Nationwide, the President's Clean Water Initiative cost/benefit analysis demonstrated that even the "more targeted stormwater plan" it proposes, as compared with "a stringent interpretation" of the 1987 Clean Water Act, would reduce loadings of urban pollutants "by 75 to 80 percent in developing areas and by 15 to 25 percent in areas already developed."[8] Similarly, EPA's extensive and detailed Urban Stormwater Handbook concludes that " it is more cost effective to prevent urban runoff pollution problems and protect existing resources than to implement pollution controls once a problem exists."[9] For this reason, any delay in implementing controls in developing areas squanders this nation's best pollution prevention opportunities.

Two classic examples of successfully incorporating stormwater pollution prevention into site design and thus significantly reducing flooding and pollution and lowering costs, are **Woodlands, Texas** and **Village Homes** in **Davis, California.** In **Woodlands**, outside of Houston, the 1974 design of the 2,000 unit development included the preservation of natural areas for stormwater capture, transport and treatment. Houses were built along ridgetops, leaving the floodplain for open space and stormwater infiltration. Woodlands' stormwater system cost $4.2 million while a conventional drainage system would have cost the developers $18.7 million -- a saving of over $14 million. This low cost "design with nature" drainage system also prevented flooding better than conventional stormwater management. In April 1979, a record storm dropped 9 inches of rain in five hours. While neighboring houses were damaged or flooded, no houses within Woodlands sustained any flooding. The same prevention performance was repeated during the hurricanes of 1983 and 1987.[10]

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[8] U.S. E.P.A., Office of Water, President Clinton's Clean Water Initiative: Analysis of Benefits and Costs ES-4 to ES-7 (March 1994) (hereafter Initiative B/C Analysis).

[9] U.S. EPA, Office of Research and Development, Handbook: Urban Runoff Pollution Prevention and Control Planning 1 (Sept. 1993).

[10] Cahill Associates, Stormwater Management in the New Jersey Coastal Zone, App. B "Woodlands," prepared for the State of New Jersey, Department of Environmental

(continued...)

Village Homes is a 1981 development that sought to build in stormwater and flooding prevention concepts into its design in a manner similar to that of Woodlands. The 240-unit design uses natural infiltration as a substitute for structural measures such as detention ponds, saving an estimated $800 per lot. Local and state public works officials were initially skeptical of the flood performance aspects of the "design with nature" approach, but recognized the effectiveness of this method when several large storms hit and Village Homes handled the extra precipitation without local flooding or property damage, while the neighbors were flooded.[11]

Similarly, **Austin, Texas** limits the amount of impervious cover such as roads roofs, and parking lots[12] near waterways and specifies cover requirements for construction on slopes on a watershed basis. Research indicates that the amount of impervious area in a watershed is a primary indicator of degradation and that stream degradation occurs "at relatively low levels of imperviousness (10-20%)."[13]
All subdivisions are also reviewed to ensure adequate provision for drainage. As a result of these ordinances and other measures, Austin found that over the past 15

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[10](...continued)
Protection, Division of Coastal Resources (April, 1989); R. Sykes, "Site Planning" in Minnesota Pollution Control Agency, Protecting Water Quality in Urban Areas: Best management Practices for Minnesota, 3.1-7 to 3.1-8 (1989); U.S. EPA, Water Planning Division, Results of the Nationwide Urban Runoff Program, Final Report 3-4 (1983); T. Dunne and L. Leopold, "Human Occupance of Flood-Prone Lands," Water in Environmental Planning, 421-423 (1978).

[11] A. Wilson, "Stormwater Management: Environmentally Sound Approaches," 3 Environmental Building News 1 (Sept./Oct. 1994).

[12] Impervious areas are those areas where rainfall cannot infiltrate into the ground and instead runs off.

[13] T. Schueler, "The Importance of Imperviousness," 1 Watershed Protection Techniques 100 (Fall, 1994). See also R. Klein, "Urbanization and Stream Quality Impairment," 15 Water Resources Bulletin 948-63 (Aug. 1979) (finding a significant positive correlation between degree of watershed imperviousness and aquatic life decline).

years, despite intensive urban development, there has been no degradation of water quality.[14]

Like Austin, **San Antonio, Texas** has focused on imperviousness limits as the best way to protect sensitive local waters from stormwater pollution. Recently, the San Antonio city council unanimously voted, with strong citizen support, to establish a 15% imperviousness cap for new development in the Edwards Aquifer recharge zone, the critical drinking water supply zone for the city. Implementation of this ordinance has meant municipal investment of ample staff time and training in developing non-structural design and planning, as well as technological tools for use by developers operating in the recharge zone. Public nuisance penalties are used as a strong enforcement tool for the ordinance within the city's limits.[15]

The maintenance of natural areas along streams as buffers and the use of natural stream and wetland systems to convey and treat stormwater can significantly cut costs while being more effective than conventional structural methods. **Bellevue, Washington** found the use of natural streams for flood management to be 4-10 times less costly than traditional measures.[16] **New York City,** in a project called the Staten Island Bluebelt, estimates that it will save $50 million by "preserving streams, ponds and other wetlands areas, allowing them to perform their natural functions of conveying, storing and filtering stormwater."[17]

In **Murray City, Utah**, the local government worked with the state department of transportation to control runoff from a highway by routing it to streams and wetlands in a municipal golf course. The city saves $80,000/year in water costs and the state saved $300,000 in construction costs.[18]

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[14] Apogee Research, Inc., Benefits of Storm Water Management: Case Studies of Selected Communities, Draft Final Report for Water Policy Branch, Office of Policy Analysis, U.S. Environmental Protection Agency, 43, 48 (April 1994) (hereafter "Case Studies").

[15] D. Milam, Water Resources Chair, San Antonio League of Women Voters, Letter to Diane Cameron (Jan. 19, 1996).

[16] Case Studies at 55.

[17] City of New York, Department of Environmental Protection, "The Staten Island Bluebelt Project" 1 (1995); Dana Gumb, Director, Bluebelt Project, personal communication.

Olympia, Washington found that careful planning of streets, sidewalks, and other areas will result in over 1,000 acres less impervious cover over the next decade. This will significantly decrease stormwater runoff while enhancing the character of the city.[19] A study of 39 cluster development programs, including many near **Washington, D.C.** and **Baltimore, Maryland**, found that careful planning can reduce site imperviousness by 10-50% at minimal to no real cost.[20]

Recently, the EPA, the Urban Land Institute, the American Planning Association and the National Association of Home Builders identified numerous innovative "developments that incorporated urban runoff management requirements into site development" and realized substantial water quality benefits and economic benefits. The examples included new and existing, residential and commercial developments and the economic benefits flowed to both the homeowners and the developers both on the first sale of the property and on resale. The innovative communities include **Columbia, Maryland** (73% of people interviewed would pay more for stormwater controls that enhance fish and wildlife), **Boulder Colorado** (lots near wetlands sold for 30% premium), **Champagne-Urbana, Illinois** (82% of residents would pay more for lots near wet ponds), **Wichita, Kansas, St. Petersburg, Florida** and many others.[21]

A recent broad-based survey of nearly 60 monitoring programs that evaluated the performance of stormwater treatment technologies, namely constructed pond and wetland systems, compiled a wealth of data demonstrating the effectiveness of known methods.[22]

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[18] Initiative B/C Analysis at 19-20.

[19] C. Wells, "Skinny Streets and One-Sided Sidewalks: A Strategy for not Paving Paradise," 1 Watershed Protection Techniques 135 (Fall 1994).

[20] T. Schueler, "Use of Cluster Development to Protect Watersheds," 1 Watershed Protection Techniques 137 (Fall 1994).

[21] U.S. EPA, "Economic Benefits of Stormwater Controls," available on the EPA homepage on the internet under offices/water//Urban Land Institute/case studies.

[22] T. Schueler, "Performance of Stormwater Pond and Wetland Systems," in D. Kuo (ed.) Engineering Hydrology, American Society of Civil Engineers, 747-53 (1993).

In sum, early site design has probably the greatest potential for cost-effective stormwater pollution prevention. It is for that reason that it is important not to delay encouraging or requiring the fast-growing suburban areas around many cities to address stormwater: every day that passes without stormwater planning represents a least-cost opportunity missed.

In addition to local site design, innovative municipalities have conducted research to determine the root causes of water quality impairment. **Santa Clara County, California**, for example sponsored a study that identified the wear-and-tear of automobile brake pads and tires as major sources of copper, cadmium, and zinc via highway runoff, into South San Francisco Bay.[23] This kind of municipally sponsored pollution prevention research is crucial to future precisely targeted toxics reduction strategies.[24]

Similarly, the **Twin Cities** in **Minnesota** are making good use of their long-term research into stormwater detention ponds and constructed wetlands systems. The "Chain of Lakes" project is a large watershed restoration project aimed at restoring a handful of lakes crucial to the economy and quality of life in Minneapolis. Central to the project is the construction of a $3 million stormwater wetland and catch basin system based on previous site-specific research.[25]

B. Control of Construction Runoff Through Local Ordinances and Enforcement

One of the most significant sources of stormwater pollution is the construction stage of development when vegetation is removed and bare soil is easily eroded. Yet the components of effective construction erosion control ordinances are well known and fairly simple to enact.

Existing regulations governing the clearing and grading of development sites can be significantly improved to ensure that these "most destructive" phases of construction contribute less to the stormwater pollution problem. For example, one third of the regulations requiring developers to revegetate areas exposed during construction fail to provide a time limit for permanent revegetation. By simply including temporal requirements for revegetation, development regulations would decrease the opportunities for destructive soil erosion that ultimately escapes as stormwater runoff. Another common sense means to bolster existing regulations include requiring developers to sequence construction to reduce this time exposure.[26]

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[23] T. Schueler, "Cars are Leading Source of Metal Loads in California," 1 Watershed Protection Techniques 28 (Feb. 1994).

[24] Woodward-Clyde Consultants, "Santa Clara Valley Nonpoint Source Pollution Control Program, Source Identification and Control Report," 2-12, 3-5 (Dec. 1992).

[25] G. Oberts, P. Wotzka, and J. Harstoe, "The Water Quality Performance of Select Urban Runoff Treatment Systems," Report to the Legislative Commission on Minnesota Resources (Metropolitan Council, June 1989); P. Blixt , "Minneapolis Chain of Lakes Implementation Phase Workplan," Clean Water Partnership, Phase II Project (Minehaha Watershed District (undated).

Increased outreach concerning proper construction techniques -- all well known and many already on the books in many states and municipalities in addition to those found in the EPA manual for the construction site NPDES program -- can dramatically reduce erosion and sedimentation. A study in **North Carolina** found that frequent and thorough inspections "directly" led to better installation and maintenance of erosion control measures.[27] **Tulsa, Oklahoma** found that its construction site stormwater controls averaged 70% effectiveness in removing total suspended solids. Yet another study found widespread opportunity for pollution prevention through better implementation and enforcement of existing construction practice standards.[28]

Many states have established NPDES general stormwater permits which incorporate state construction manuals. These manuals demonstrate that methods of significantly -- almost entirely -- preventing stormwater pollution from construction are well-known and affordable.[29]

C. Public Education, Involvement, and Government Responsiveness to Complaints

The fact that the general public fails to perceive stormwater as an environment problem and to realize the connection between their individual actions and stormwater pollution actually provides a large opportunity for stormwater prevention through additional education. For example, education efforts as simple as stenciling storm drains with warnings of pollution problems can prevent the dumping of automotive and household toxic and hazardous wastes. In addition, increased support for municipal stormwater pollution prevention programs can be easily engendered through public education programs.

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[26] T. Schueler, "Clearing and Grading Regulations Exposed," 1 Watershed Protection Techniques 141 (Fall 1994).

[27] R. Paterson, "Enforcing Sediment Pollution Regulations: Lessons from North Carolina," 1 Watershed Protection Techniques 143 (Fall 1994).

[28] R. Paterson, "Construction Practices: The Good, the Bad, and the Ugly," 1 Watershed Protection Techniques 95 (Fall 1994)

[29] See, e.g., New York State Department of Environmental Conservation, Reducing the Impacts of Stormwater Runoff from New Development (1992).

Public education campaigns have been found to significantly reduce pollution from residential lawn care and residential septic systems, both among the larger sources of stormwater pollution. These programs can also help residents to save money. The **Rouge River (Michigan) Remedial Action Plan** encourages homeowners not to use as much lawn fertilizer. In **Plano, Texas**, residents were encouraged to leave grass clippings on their lawn and the city saved $60,000 in disposal costs while the homeowners saved an estimated $22,000 in plastic bags costs. In **Seattle, Washington** a similar program saved $378,000.[30]

Septic systems, if properly maintained, generally do not contribute to water quality impairment. But aggressive public education is often needed -- sometimes in addition to enforceable rules or a septic maintenance district and utility -- to encourage homeowners to perform such maintenance. Innovative communities, such as **Georgetown and Stinson Beach, California** and **Bellevue, Washington**, have instituted such septic programs including education, free inspections, and septic utilities.[31]

Similarly, public education efforts can effectively encourage auto recycling facilities and other industrial hotspots to prevent stormwater pollution before it escapes.[32] **Santa Clara, California** found simple alterations to operating practices to be cost-effective, including preventing stormwater from contacting working areas where chemicals are used and more careful equipment washing.[33] **Santa Clara Valley** and the **San Jose** Office of Environmental Management published a handbook for automobile service stations containing guidance on effective runoff reduction through changed operating procedures that require "little or no investment to implement."[34]

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[30] C. Barth, "Toward a Low Input Lawn," 2 Watershed Protection Techniques 254 (Fall 1995).

[31] R. Ohrel, "Dealing with Septic System Impacts," 2 Watershed Protection Techniques 265 (Fall 1995).

[32] Note, "Auto Recyclers -- Onsite BMPs Mitigate Urban Runoff Hotspots," 1 Watershed Protection Techniques 224 (Summer 1995).

[33] T. Schueler, "Practical Pollution Prevention Emphasized for Industrial Stormwater," 1 Watershed Protection Techniques, 31 (Fall 1994).

Several innovative communities also found that public education and involvement engenders support for municipal programs. **Ann Arbor, Michigan**, for example, found strong public support for a stormwater program, including stormwater fees, in part to due rapid response to citizen complaints and money budgeted to address them.[35] **Austin, Texas,** reduced garbage in stormwater by 72% by involving the public.[36]

Montgomery County, Maryland has established "Stream Teams" that combine the forces of the County Department of Environmental Protection and County schools to monitor water quality conditions in local streams. This cooperation works in a phased approach, where students begin in elementary school and progress to higher and higher levels of monitoring. At the advanced high school level, Stream Team members volunteer as trained assistants working directly with DEP monitoring staff.[37]

Moreover, progress made in the area of public education has yielded significant guidance about the most effective methods of communicating these issues to the public. For example, the EPA has determined that successful public education efforts should be ongoing and tailored to each sector of the public.[38] Evidence in a **Milwaukee** survey demonstrated how the public is more receptive to an education message communicated through the mass media.[39]

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[34] Santa Clara Valley Water Control District (1992) (found on EPA database on the Internet).

[35] Case Studies at 31.

[36] Case Studies at 50.

[37] C. Weigand, "Adopting Municipal NPDES Stormwater Discharge Permit Requirements to Also Address Local Needs: Montgomery County, Maryland's Experience and Program Direction," George Washington University Seminar on Wet Weather Flows (May 1994).

[38] Id.

[39] J. Simpson, "Milwaukee Survey Used to Design Pollution Prevention Program," 1 Watershed Protection Techniques 133 (Fall 1994).

Education is crucial to stormwater management, but a stormwater pollution prevention program must not stop there. While individuals are one of the sources of stormwater pollution, they are not the only source and industrial, commercial and municipal sources must also be controlled. The most successful education programs, such as those in **Baltimore, Maryland,** view public education as a stepping stone to individual and community action.[40]

D. Increased Implementation and Enforcement of Existing Authorities

Many municipalities have found that merely by enforcing existing authorities they can substantially reduce stormwater pollution at very low cost. For example, the **Huron River (Michigan) Pollution Abatement Project** aggressively sought out improper connections to storm sewers to reduce the discharge of chemicals into the stormwater. "Over 95% of the facilities contacted" cooperated and "most of the improper connections were easily corrected."[41] Nearly 50% of service stations, 14% of residences, and 7 to 38% of industrial facilities which stored or used chemicals were found to have some type of illicit connection; virtually all were corrected; as a result fecal coliform concentrations in stormwater were reduced by 75-99%.[42]

Spurred on by the NPDES stormwater requirements, the city of **San Diego, California**, passed an ordinance that prohibits the discharge of non-stormwater to a stormwater conveyance system. This prohibition is mostly enforced via responses to citizen complaints that are phoned in to city officers.[43] Similarly, **Tulsa, Oklahoma** took the simple step of identifying and correcting 35 illicit storm sewer connections. This resulted in measurably improved water quality.[44]

New York City undertook an extensive survey of its shoreline to find illegal discharges. Several hundred illegal connections have been corrected, usually, of course, at the discharger's expense, not the city's.

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[40] A. Markowitz, "Making Connections Between People and Urban Waters," 7 The Volunteer Monitor 1 (Fall 1995); J. Drinkwin, "Does Community Education Reduce Water Pollution?" 7 The Volunteer Monitor 1 (Fall 1995).

[41] Case Studies at 32.

[42] Id. at 36-38.

[43] Libby Lucas, Environmental Health Coalition, San Diego, California, personal communication.

[44] Initiative B/C Analysis at 21.

South Portland, Maine tried incentives before enforcement and was extremely successful in reducing flows from residential roof gutters and basement sump pumps into sewers. The city offered to reimburse homeowners who disconnected the gutters or pumps voluntarily. To date, the program has redirected 60% of known sources at a very low cost.[45]

In short, enforcement of existing authorities has been found to dramatically reduce pollution at extremely low cost.

E. Improved Operations And Better Program Integration

Many innovative municipalities have found that relatively simple changes in their own operations provide great benefits. These range from better storm drain maintenance to more stormwater management within existing CSO programs, to improved household hazardous waste collection or chemical usage.

For example, **Ann Arbor, Michigan** found that catch basin maintenance "has reduced concentrations of pollutants in runoff and prevented the accumulation of sediments and associated pollutants in storm drains."[46] Similarly, **Austin, Texas** found that drainage inspection and maintenance and curb inlet filters significantly reduced solids and floatables in stormwater.[47] **Bellevue, Washington** reduced concentrations of lead and solids in runoff by 10-25%, simply by biannual cleaning of storm drain inlets.[48]

Many communities, such as **Austin,**[49] **Tulsa, Oklahoma** and **Santa Clara, California** have found simple street sweeping effective. Tulsa estimates that street sweeping and structural operation and maintenance reduce suspended solids by up to 50%, metals by 10%, and total solids and lead by 10-25%. Santa Clara estimates that street sweeping has prevented the discharge of 2,500 pounds of copper and 46,000 cubic yards of material.[50]

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[45] J. Reynolds, "The Roof Drain and Sump Pump Removal Program: An Innovative Approach to Inlfow Reduction," National Conference on Sanitary Sewer Overflows: Abstract Collection 55 (U.S. EPA April 1995).

[46] Case Studies at 37.

[47] Case Studies at 43, 49.

[48] Case Studies at 56.

[49] Case Studies at 44.

Integration of stormwater measures with traditional combined sewer overflow management measures is another area of municipal leadership. **Cleveland, Ohio** is mostly served by combined sewers that carry stormwater mixed with human and industrial waste. Combined sewer overflow solutions must include stormwater management measures, although traditionally CSO programs have tended to focus on reducing human waste solids and pathogens. Cleveland is beginning to take steps to integrate stormwater solutions into its existing CSO control program, including educating the neighboring cities about the need to adopt stormwater control ordinances, and the creation of a pilot urban watershed program for the Mill Creek Watershed. Cleveland's example will hopefully spur other CSO cities to pay more attention to stormwater monitoring and prevention as a component of CSO reduction programs and permits.[51]

Municipal programs to reduce the quantity of chemicals, such as pesticides, herbicides and fungicides, used on public lands can similarly both reduce expenses and reduce runoff contamination. Although the precise percentage of turf chemicals that runs off into streams is unknown, studies indicates that such chemicals are found in urban streams.[52] Innovative communities, such as those examined in the **Rouge River (Michigan) area** and the **Chesapeake Bay area**, have reduced such pollution by switching to integrated pest management and changing mowing height; they have also reduced costs by 22% in one case or by 10% in another.[53]

F. Innovative Financing Methods for Stormwater Control Programs and Their Cost-Effectiveness

Several studies have been done to estimate the cost of stormwater programs. Despite the rhetoric often heard, stormwater pollution prevention and control is affordable. A recent study by the National Association of Flood and Stormwater

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[50] Initiative B/C Analysis at 20-21.

[51] D. Cameron, Healing the Waters of Greater Cleveland: Poison Runoff Problems and Solutions 38 (Natural Resource Defense Council, Summer 1995).

[52] C. Barth, "Nutrient Movement from the Lawn to the Stream?" 2 Watershed Protection Techniques 239 (Fall 1995); T. Schueler, "Urban Pesticides: From the Lawn to the Stream," 2 Watershed Protection Techniques 247 (Fall 1995).

[53] C. Barth, "Toward a Low Input Lawn," 2 Watershed Protection Techniques 254 (Fall 1995).

Management Agencies found that stormwater management typically costs approximately $10 per person per year. This can be compared to the approximately $300 per person per year cost for sewage treatment.[54]

This estimate for the cost of stormwater pollution management is consistent with the often-cited "result" of the Montgomery-Watson study performed for the National League of Cities. That study found the "average" Phase I municipality's cost for submitting the NPDES application was over $600,000. Of course, the application required many important planning actions such as a fairly thorough analysis of the municipality's stormwater and an examination of existing and potential local authorities. Assuming the "average" Phase I municipality has 200,000 people (they all have over 100,000), this comes to $3 per person. Since the applications often include important long-term upgrade efforts, such as developing a computerized map of the municipality or region, this cost is actually quite reasonable. (The claim that this cost does not cover any pollution reduction is based on the assumption that all stormwater control will be achieved through constructed engineered structures; however, many of the most cost effective methods of pollution prevention involve planning, preservation and education, not concrete.)

Many municipalities have established stormwater utilities or districts to obtain a dedicated revenue source. There are at least 100 such utilities nationwide. The cost to the citizen appears relatively modest. In **Ann Arbor, Michigan**, for example, the stormwater utility charge for an average residence is $7.65 to $9.01/quarter; in **Austin, Texas** the average household charge is $3.82/mo.; in **Bellevue, Washington** the average charge for a 10,000 - 12,000 square foot property with a typical home is $16.44/two months; and in **Boulder, Colorado** the average charge is $4.40/month.[55]

Such innovative financing can provide for very effective programs. For example, in 1990, **Olympia, Washington** established a permanent stormwater utility which has funded both structural and non-structural stormwater measures and programs. Although Olympia is small (population 33,000), revenues from the stormwater utility are about $2.2 million per year. These fund a full-time staff that includes code enforcement officers and public educators and technical trainers. Four jurisdictions cooperate in addressing flooding, water quality, and habitat destruction and have found significant cost savings.[56]

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[54] Doug Harrison, General Manager, Fresno Metropolitan Flood Control District, Urban Wet Weather Flows Federal Advisory Committee Meeting, December 4-5, 1995.

[55] Case Studies at 34, 47, 55, 64.

These reasonable charges add up to significant funding for stormwater programs. The state of **Maryland** Department of Environment staff estimated in 1994 that the annual revenue potential of the statewide implementation of stormwater utilities to be from $64 to $72 million.[57]

Innovative municipalities have found that the public once educated about the stormwater problem, appears willing to pay reasonable fees for stormwater control.[58] Thus, while additional funding assistance is always important to municipal pollution control efforts, the purported cost of stormwater control is not a real barrier to continued established pollution prevention.

G. Stormwater Programs Often Provide Significant Ancillary Benefits to the Municipal Community

The prevention and control of urban stormwater often involves more careful urban planning, the preservation of sensitive natural areas such as steep slopes, wetlands, or stream buffers, and the creation of ponds. These actions often provide very significant benefits to the public in terms of recreational and aesthetic opportunities and reduced flooding. As noted above, property values (and ultimately municipal tax receipts) often increase.

Orlando, Florida, for example, constructed several ponds to manage and treat runoff. It found that property values in the area of the ponds increased and used the ponds as the centerpiece of an urban natural park.[59] Indeed, Orlando was U.S. EPA's 1992 "City of the Year" for stormwater management. The driving force behind Orlando's program was citizen demand for cleaner water. "Citizens marched on

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[56] Joanne Richter, Water Resources Program Supervisor, City of Olympia, Washington, personal communication, January 17, 1996.

[57] J. George, "Financing Stormwater Management: Maryland's Experience with Storm Water Utilities," Watershed '93 185-89 (1993).

[58] J. Simpson, "Milwaukee Survey Used to Design Pollution Prevention Program," 1 Watershed Protection Techniques 133, 134 (Fall 1994).

[59] Initiative B/C Analysis at 20.

[Orlando's] City Hall in the late 1980s demanding better water quality. In response to the citizen demands, the city enacted a stormwater utility and an aggressive retrofit program."[60]

Similarly, **Bellevue, Washington** found that the clean-up of Mercer Slough, a 325-acre wetland, along with park enhancement, increased canoeing and park visitation.[61] **New York City's** Bluebelt is creating an intricate chain of open space in one of the country's most crowded cities. This provides wildlife habitat, educational and recreational opportunities, and a bit of peace.

In **Portland, Oregon**, where the quality of life -- and particularly water quality and access to nature -- is the reason people give for living there, municipal agencies and local citizen groups are actively collaborating on linking stormwater management with open space enhancement. Lands purchased for stormwater detention provide actively used fish and wildlife habitat, wildlife viewing opportunities, and flood protection as well as water quality improvement.[62]

In addition to open space and recreational amenities, stormwater pollution prevention, since it is best done on a watershed basis, often can spawn regional cooperation. For example, of the approximately 29 municipal entities in **Dade County, Florida**, only three were initially required to apply for the NPDES stormwater permit. All 29 entities, however, contribute to the stormwater pollution of Biscayne Bay. EPA and Florida encouraged all 29 municipalities to work together and now all operate under a single NPDES permit. Municipal officials who had previously not communicated are now cooperating, opening the door to other regional solutions. In addition to the improved coordination, the Dade County municipalities have also found significant cost sharing benefits.[63]

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[60] E. Livingston Florida Dept. of Environmental Protection, Stormwater Section Personal communication to Diane Cameron, January 10, 1996.

[61] Initiative B/C Analysis at 19.

[62] Michael Houck, Urban Naturalist, Audubon Society of Portland, personal communication, January 1996.

[63] E. Livingston, Florida Department of Environmental Protection, Stormwater Section, personal communication (Jan. 10, 1996).

As you can see, urban stormwater pollution prevention is feasible, affordable, effective and well-known and understood. Municipal leaders nationwide have realized significant economic, ecological and political benefits from well-managed stormwater programs. Since stormwater pollution is one of the largest remaining sources of water quality impairment, and since early site planning is the most efficient method of control, the NPDES program must move forward to take advantage of this country's best opportunity for cost-effective pollution prevention for all urban areas.

Thank you for this opportunity to respond to your inquiry. We hope this material assists the committee in drafting environmentally protective Clean Water Act amendments.

Sincerely,

Peter Lehner
Diane Cameron
Jessica Landman

enc.

Prepared Statement of Ronald S. Dungan, President, National Association of Water Companies

Good morning Mr. Chairman, my name is Ron Dungan. I am the President of the National Association of Water Companies (NAWC). The NAWC is the trade association representing the nation's investor-owned water utilities. Its 360 members in 41 States provide safe, reliable drinking water to more than 22 million Americans every day. Our member companies provide service to residents in cities such as San Jose, California, Indianapolis, IN, and the Suburbs of Philadelphia, PA, among many others. Our members employ a combined work force in excess of 15,000. Eighteen of our largest member companies have shares which are publicly traded. Ten of our companies also provide wastewater service to 350,000 persons nationwide.

I am also Senior Vice President for United Water Resources. United Water is the nation's second largest investor-owned water utility, serving more than two million people in 13 States. While the majority of our work is providing drinking water to the public, we also provide wastewater service to many of our customers. We are a partner in the entity that was selected in 1993 to privatize the wastewater plants in Indianapolis, Indiana. This is the largest privatization contract of wastewater facilities in the United States and has resulted in savings to the city in the past year of $14 million or 42 percent as a result of the contract. United Water is continuing to pursue Public-Private Partnerships as we believe they can be a significant factor in helping to solve the major infrastructure problems existing in the United States.

The Indianapolis project is a model project that demonstrates the benefits that can be achieved when private companies and cities work together. Operations of the plant have maintained quality effluent while posting an 86 percent decrease in permit exceedances. Workers displaced by the transition were placed in comparable positions in the public and private sectors, with 100 percent placement—of those wishing so—achieved within 8 months. Educational assistance, job training and career counseling were also provided during the transition period. Positive relations with the local union, AFSCME, continue, as union grievances have decreased from 38 (under the city) to one this year, salaries have increased, employees have received additional training, bonuses, and incentive programs, employee accidents are down 70 percent, lost time due to injury down 87 percent, sick-time per employee down 50 percent. In fact, relations with the local union have been so positive that the union is a partner of ours in our proposal to expand the contract to include the collection system.

All of the particulars of this project are included in a 1 year summary report to the Indianapolis City County Council which is included in this testimony (Appendix A).

Mr. Chairman, I applaud your leadership in holding this series of hearings on the Clean Water Act (CWA). My company and other NAWC members, whom own or operate wastewater treatment facilities, are directly affected by the requirements of this Act. The experience of these companies demonstrates that the private sector can play a role in the provision of wastewater service, and that role should continue to grow. I am not here today asking for any special incentives or special treatment for private companies, I am here simply to talk about the current disincentives to privatization which hinder our industry, and limit the options of local governments in dealing with their utility infrastructure. Changes to the Clean Water Act to remove these impediments to privatization and that strive toward a level playing field between municipal and investor-owned utilities will be the main focus of my statement today.

THE NEED FOR GREATER PRIVATE PARTICIPATION IN THE PROVISION OF WASTEWATER TREATMENT FACILITIES

Approximately 95 percent of Americans receive their wastewater service from various government agencies and municipal utilities. The cost to the public of repairing and maintaining an aging wastewater infrastructure, along with compliance costs associated with the mandates of both the Clean Water Act and the Safe Drinking Water Act (SDWA) is enormous. Providing this basic public service seriously challenges the funding and technical capabilities of all systems. EPA's 1992 needs survey estimates that the Clean Water Act alone will cost Federal, State and local governments $137 billion over the next 20 years. This is significantly greater than the funds available and is $57 billion more than the 1990 estimate.

In addition, these needs come during a time when the demand for scarce Federal resources is fierce and growing. The current difficult debate going on here in Washington regarding the Federal budget, dramatically underlines this point.

Making the private sector a partner in the provision of wastewater treatment facilities is one way additional resources can be raised to address the growing needs. I recommend two changes to the Act that will facilitate the ability of the private sector to invest in wastewater treatment facilities.

PRIVATIZATION OF PUBLICLY OWNED TREATMENT WORKS

First, a definition of a "publicly owned treatment work", or POTW should be added to the Clean Water Act, as in Sen. Lautenberg's legislation, S. 1436. This legislation bases the definition of a POTW on purpose rather than ownership. The Safe Drinking Water Act clearly defines drinking water systems by purpose rather than ownership.[1] This provides for uniform environmental regulation of a drinking water system whether owned by one of our member companies or a municipality.

In contrast, the Clean Water Act does not define a "publicly owned treatment work" (POTW). It does acknowledge the existence of privately owned treatment works in section 201(h) and EPA regulations have recognized a distinction. And it is this distinction which unfairly and unnecessarily places investor-owned POTWs at a disadvantage. Why should different regulations exist for effluent quality and sludge depending on ownership?

For example, a privately owned wastewater treatment facility loses the domestic sewage exclusion provided to POTWs under the Resource Conservation and Recovery Act (RCRA). This exclusion exists to avoid duplicative CWA and RCRA permits for the same unit. A private facility is subject to Best Available Technology Economically Available/Best Conventional Pollutant Control Technology requirements? while a public one is subject to secondary treatment requirements. Two very different requirements.

While the Clean Water Act demands different requirements of compliance for municipal and investor-owned POTWs, these differing requirements obviously are not necessary to provide clean water. They merely serve as barriers to entry of the private sector and a barrier to the transfer of facilities between private and public ownership. Entirely different requirements would apply to a treatment facility sold by a municipality to a private investor, even though the purpose of the facility and its customer base remain unchanged.

I strongly urge the Committee to amend the Clean Water Act to provide a single and clear definition of a wastewater treatment facility based on purpose rather than ownership, as in Senator Lautenberg's legislation. S. 1436 will provide uniform regulations for all such facilities. This in turn will provide local governments the flexibility to make arrangements for the provision of wastewater services that meet local needs. The United States Conference of Mayors is strongly opposed to regulations which restrict their ability to solve the major infrastructure problems. With the scarcity of funds available, cities need the option of the Public/Private Partnership and we have proven that significant operational improvements can take place with cost savings as well.

PARTICIPATION OF THE PRIVATE SECTOR IN THE STATE REVOLVING FUND (SRF)

Second, the Clean Water Act should be modified to encourage the establishment of public-private partnerships to construct and manage treatment works. Under current law (section 601(a)(1)), SRF funds are only available for treatment works which are publicly owned. Modifying this section to permit SRF moneys to be used in investor-owned facilities and in conjunction with private funds could leverage additional moneys which will help close the funding gap described above and free-up more funds for other important programs authorized under the Act.

In 1991 this Committee in its report on the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), made reference to water and sewer infrastructure as follows: "the public-private partnership is important and should be encouraged. From the Federal perspective, one of the ways to approach infrastructure improvement would be to ease unnecessary Federal constraints preventing the mixing of Federal dollars with private funds on projects". The Committee looked to the private sector not only to "bring new sources of capital to infrastructure projects" but also to "expedite the completion of projects with the efficiencies of the private sector".[2]

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[1] Section 1401(4) of the Safe Drinking Water Act reads: "The term "public water system" means a system for the provision to the public of piped water for human consumption, if such system has at least 15 service connections or regularly serves at least twenty-five individuals. Such term includes (A) any collection, treatment, storage, and distribution facilities under control of the operator of such system and used primarily in connection with such system, and (B) any collection or pretreatment storage facilities not under such control which are used primarily in connection with such system."

Also, in S. 1316, the Safe Drinking Water Act Amendments of 1995? which just recently passed out of both this committee and the full Senate unanimously, there is authorized a drinking water SRF. The drinking water SRF is generally based on the Clean Water SRF, with one important distinction, S. 1316 correctly allows investor-owned drinking water facilities to receive SRF loans. This committee and the Senate correctly choose not to deny the customers of investor-owned water utilities the opportunities the drinking water SRF will provide. To deny investor-owned utilities access to funds discourages the most cost effective solution to problems.

Our customers pay Federal taxes, and it is from these taxes that the Clean Water SRF funds originally flowed. Therefore7 these taxpayers should not be denied the advantages the Clean Water SRF provides. I again encourage the committee to seek a correction of this area of the Clean Water Act.

CODIFICATION OF EXECUTIVE ORDER 12803

In H.R. 961, the House of Representatives passed legislation to amend the Federal Water Pollution Control Act (commonly referred to as the Clean Water Act), in which there was included a codification of Executive Order 12803. The NAWC supports a codification of Executive Order 12803. However, we would like to see it more broadly applied, and with a few important changes.

This Order—issued by President Bush in 1992—was designed to facilitate the sale of government facilities that had received funding through Federal grants.

Many municipal drinking water systems and most wastewater systems were financed during the last several decades in whole or in part with Federal grant money. Grant repayment conditions are imposed by the Office of Management and Budget (OMB) if the facility is sold or leased. The presumption by OMB is that the asset's use would change with private ownership. However, unlike housing and other general purpose structures, water and wastewater facilities are almost never converted to some alternate use.

Executive Order 12803 requires the local government to repay the undepreciated portion of the grant. The local government, however, is allowed to recover its costs before any funds are used for grant payback. The Executive Order also places restrictions on the use of proceeds received by the city as a result of the sale or lease. The Executive Order directs Federal agencies to adopt rules to carry out its requirements. To date, implementation has been very disappointing and clearly has not achieved the order's intent of streamlining privatization efforts.

The NAWC supports legislation to codify an improved version of Executive Order 12803 (S. 1063). Under the plan as envisioned:

(1) A city would not be obligated to repay Federal grants provided the grant-funded facility continues to be used for its original purpose. Long-lived investments in water and wastewater facilities that continue to be used as such should not require repayment.

(2) Local governments could use the proceeds it received as a result of the transfer without the restrictions found in Executive Order 12803.

The codification of the Executive Order contained in H.R. 961 is a direct codification, which is to say like the Executive Order, much of the grant repayment would still be required. Requiring this grant repayment would severally limit the local government's ability to sell their assets if they so choose. This would? therefore? do little to achieve the Order's goal of increased privatization.

Also, the language in H.R. 961 is limited only to wastewater facilities. There are many privatization opportunities (bridges, roads, airports, etc.) potentially available to local governments if a codification of the order is passed beyond H.R. 961's narrow reach.

Finally, the NAWC has concerns with some of the language in the codification of the order in H.R. 961. Specifically, starting on page 253 line 17:

> "(C) with respect to subsection (k), to the extent consistent with the North American Free Trade Agreement and the General Agreements on Tariffs and Trade——
>
> "(i) is a majority-owned and controlled by citizens of the United States; and
>
> "(ii) does not receive subsidies from a foreign government."

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[2] House Committee on Public Works and Transportation; House Report No. 102–171(I); July 26, 1991; pgs. 13–24.

This language on the surface seems a rather benevolent "buy American" clause, however, it would have no positive practical effect. It would only serve to cause confusion and uncertainty to localities which are pursuing the privatization of an infrastructure asset. This confusion would undoubtedly lead to delays and even the abandonment of privatization agreements. The language should not be included in a codification of Executive Order 12803.

CONCLUSION

The changes described above will help produce a more effective and efficient Clean Water Act. This will hasten the achievement of its worthy goals—fishable and swimmable waters.

We appreciate this opportunity to provide testimony on the Clean Water Act and look forward to working with you on these issues during reauthorization. Please feel free to contact the NAWC if you require additional information on any of these items.

Appendix A

INDIANAPOLIS ADVANCED WASTEWATER TREATMENT FACILITIES

WHITE RIVER ENVIRONMENTAL PARTNERSHIP

ONE YEAR SUMMARY

to the Indianapolis City County Council

MARCH 20, 1995

WHITE RIVER ENVIRONMENTAL PARTNERSHIP
IWC Resources Corporation • JMM Operational Services, Inc. • Lyonnaise des Eaux

Executive Summary

The White River Environmental Partnership (WREP) assumed responsibility for the contract operations and maintenance of the City's two Advanced Wastewater Treatment Facilities on January 31, 1994. The project's goals of increased efficiencies and improved operations are expected to save taxpayers $65 million over the life of the five year contract.

While the original Department of Public Works workforce included 328 employees, the plants now operate with a total staff of 176. Workers displaced by the transition were placed in comparable positions in the public and private sectors, with 100% placement occurring within eight months. Educational assistance, job training and career counseling were also provided during the transition period.

In one of the first agreements of its kind in the nation, AFSCME signed a progressive bargaining agreement on behalf of its members. Positive relationships with the union continue, as union grievances have decreased from 38 (under the City) to one this year. WREP employees have received additional training, bonuses and incentive programs and enhanced job descriptions.

Operations of the plant have maintained quality effluent while posting an 86% decrease in permit exceedances. Comprehensive process control changes have resulted in increased operational flexibility, permitting the plant to handle increased flows during wet weather events and providing more energy efficient operation.

Facilities maintenance has improved performance through a centralized planning function for both plants. A new computerized maintenance manager system will provide coordination and accounting oversight to better track work orders and inventory. Increased preventive and predictive maintenance efforts by staff have reduced equipment vibration problems by 70%, dramatically reducing expensive corrective maintenance and equipment replacement costs to the City.

WREP's on-site laboratory, recipient of IWPCA's Excellence Award, improved its quality assurance/quality control methods and refined its standard operating procedures. The Industrial Pre-Treatment Section improved industry compliance and, for the first time, completed all of its required annual inspections of regulated industries.

A newly established employee safety committee led the way to a 70% reduction in employee accidents over the first year, and a 40% reduction in IOSHA reportable incidents. On-site safety and training coordinators facilitated 2814 hours of employee training, utilizing video, visitor and staff-directed instruction. Tuition reimbursement programs have also encouraged employees to continue to reach their personal goals.

Consolidation and reduction efforts for warehousing, inventory and fleet services have decreased associated costs in each instance of more than 50%. WREP's improved service and response time to vendors, which includes an 11% overall MBE/WBE rate, has resulted in additional cost discounts for prompt payments.

Community involvement was initiated through a community partnership with Arlington High School. Students participated in working internships and travel opportunities in conjunction with the school's AMEN and A-Women programs, creating opportunities for at-risk youths. Additionally, interaction with the United Way and other civic organizations encouraged employee participation and commitment to service.

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INDIANAPOLIS ADVANCED WASTEWATER TREATMENT FACILITIES
WHITE RIVER ENVIRONMENTAL PARTNERSHIP
ONE YEAR SUMMARY

The Contract:

The City of Indianapolis and the White River Environmental Partnership (WREP) entered into a five year contract, effective January 31, 1994, for the contract operations and maintenance of the city's two AWT facilities. WREP's partners include IWC Resources Corporation (the holding company of the Indianapolis Water Company), JMM Operational Services, Inc. of Denver, CO; and Lyonnaise des Eaux, a major French utilities corporation.

The $14 million annual contract is expected to save taxpayers more than $65 million over the life of agreement. The City retains ownership of the plants and equipment, payment for corrective maintenance work, and major capital improvement projects while WREP is responsible for personnel, routine maintenance and daily operational costs.

The Belmont and Southport plants are each designed to process 125 million gallons of wastewater per day (MGD), with a peak capacity of 150 MGD. They serve the entire Marion County area, with the exception of Speedway, and provide service to a number of satellite communities.

The Employees:

While originally staffed with 328 city workers, the plants now operate with a total staff of 176 employees, 170 of whom are former city employees. Current WREP employees enjoy comparable wages, increased benefits, bonus and incentive programs, tuition reimbursement, 401-K and retirement programs, continued cross training, and career advancement opportunities. Outstanding employees have visited and/or transferred to other Partnership projects to lend expertise and share industry resources.

WREP recognized the Association of Federal, State, County, and Municipal Employees (AFSCME) as the official employee bargaining unit, representing approximately 35% of the plant employees. The signed bargaining agreement, one of the first in the nation between AFSCME and a private company, was ratified by a 20-1 margin. Grievances filed by AWT workers have decreased from 38 filed in 1993 under City management to one filed in 1994 against WREP. Monthly meetings between union officials and WREP management assure continued communication.

Workers displaced by the transition were assisted by WREP and the City, with all of those who sought new employment finding comparable jobs within an eight month period. Career counseling, educational benefits and job training opportunities were utilized, with WREP providing $300,000 for outplacement allowances and educational expenses over a two year period for former City workers.

Training and Safety

In addition to providing employees with enhanced professional opportunities, privatization efforts have also provided a safer environment in which to work. Workplace accidents have decreased by more than 70% in the first year of contract operations. IOSHA reportable incidents were also down 40%, with lost time to injury also decreasing 87%. With an emphasis on worker safety, JMM/OSI is proud of its company accident record averaging 10% of the national wastewater industry rate. WREP is working toward meeting that overall goal during 1995.

An active employee safety committee conducts monthly inspections and reviews standard operating procedures. The committee is refining an emergency action plan for the facilities, and raising employee awareness through bi-weekly tailgate training sessions.

Designated training and safety coordinators have conducted 2,814 hours of employee training on-site, and continue to offer licensing certification and renewal programs. 40% of the plants' certified operators have achieved the highest licensure status in Indiana, a Level IV certification.

Awards/Recognition

WREP's competitive wastewater operators team, the WREPresetatives, won the state operators' championship last summer, successfully competing in five industry events. They went on to place eighth overall in the nation, the highest finish ever for an Indiana-based team. The team also placed second in the national laboratory event.

The Indiana Water Pollution Control Association presented its annual award for Excellence in Laboratory Services to WREP's staff in October. More than 400 labs in the state are eligible for the award, with 13 receiving recognition this year. The IWPCA has also nominated the Southport and Belmont plants for an annual Gold and Silver Award, the highest state recognition of outstanding wastewater plant performance.

WREP employees were nominated by their peers to receive the first-ever "We Make a Difference" awards, presented to 38 employees during the annual holiday party. Outstanding efforts by individuals and teams were recognized with commemorative plaques and bonus checks.

Recognition was also received from the United Way for the company's first year of participation and from Arlington High School in appreciation of WREP's support and volunteerism. Arlington students participated in a summer internship program with WREP to introduce them to the working world. WREP and the school are also expanding their relationship to include interaction with the departments of foreign language, physical sciences, business, industrial arts, and graphic arts.

The Effluent:

Meeting the excellent standards set under prior City management, the major goal of the privatization project was to provide equal or better quality effluent in a more cost effective manner for taxpayers. All permit parameters (TSS, BOD, NH3, and fecal coliform) indicate continued compliance with water quality standards and equal or better performance results. Both a two year and a five year comparison of average discharge concentrations verify the plant's continued high performance.

There were no permit exceedances (the number of times the effluent exceeded the permit limits) of conventional pollutants at either plant in 1994, an accomplishment achieved only one other time (1990) in the plant's recent history. The overall number of permit exceedances was down from an average of seven per year under City operation to just one under WREP management--an 86% decrease. The single 1994 variation was attributed to cyanide, a substance which the AWT plants are not designed to remove. The majority of past City exceedances was due to high fecal coliform counts resulting from an inefficient ozonation system used for disinfection.

Impacts of raw and partially treated sewage on the White River also decreased under WREP's improved wet weather operations. The number of overflows were cut roughly in half. The average duration of overflows was also reduced by more than 50% due to the plant's increased ability to process more flow during rain events. Well-trained operators can now process up to an additional 45 MGD a day beyond the plant's design capacity during wet weather events, exceeding the former plant's processing capability using acceptable industry procedures.

Operations and Maintenance

Increased preventive and predictive maintenance efforts by staff have reduced equipment vibration problems by 70%, dramatically reducing expensive corrective maintenance and equipment replacement costs to the City. Overall maintenance coordination has been improved through a centralized planning function, and will soon be assisted by a new computerized maintenance manager system. A central permit process has also coordinated work orders and worked to increase safety measures among maintenance employees.

Combined efforts of the operations and maintenance staff have increased the flow capacity and treatment efficiency of the plant by assuring all available equipment is on-line and in working order. Prior City operation saw only nine of ten headworks pumps and three of four bioroughing towers on line at any one time. Comprehensive process control changes have increased operational flexibility and provided a more energy-efficient operation. While the mean flow through the plants was down slightly in 1994 due to dry weather, the influent pollutant loading was actually higher. Equal or better effluent readings from more polluted influent thus translate to more efficient removal by WREP processes compared to previous City operation.

Oversight/Compliance

DPW's Compliance Officer and his staff have regular interaction with WREP to monitor the contract provisions and assure strict compliance. In addition to participating in regularly scheduled meetings and receiving monthly reports, DPW staff have: 24-hour access to the plants; on-line computer monitoring capabilities of plant conditions; and maintenance auditing procedures to permit timely analysis of plant operations.

WREP management also meets on a monthly basis with the AWT Advisory Committee, an independent body of technical experts advising DPW on long-term AWT planning and activities. Regular meetings with environmental groups also discuss plant procedures and maintain open lines of communication.

Fish kill

Two fish kills on White River in the fall of 1994 were attributed to the effects of combined sewer overflows and urban runoff depleting the river's dissolved oxygen. Initial investigations by the state, the City, and an independent consultant determined the plant did not play any causative role in the incidents, as the effluent met permit parameters and the plant was operating at maximum capacity.

The Savings:

Promising to achieve $12 million in cost savings in the first year of the contract, WREP and the City have exceeded that goal. The 1993 AWT costs to the City were approximately $30 million. While the City budgeted $19,333,270 for operation of the two facilities in 1994, expenditures were only $17,576,767. Savings in operations and maintenance totaled more than the $8 million projected while maintaining quality effluent and preserving capital investments.

Consolidation and reduction efforts were successful in warehousing, inventory, and fleet services with decreased costs in each instance of more than 50%. WREP reduced the on-site warehouses from 37 to 2, decreased inventory from $6.7 million to less than $2 million (finding $1 million in additional on-hand inventory that other City departments could use), and decreased the monthly fleet costs by 54% through increased preventive maintenance and use of an outside contractor.

Increased savings were realized by the accounting department as vendors provided further cost discounts for prompt payment, usually within 10 days of receiving an invoice. The short turnaround time has also permitted additional smaller vendors to do business with WREP, including an overall MBE/WBE rate of 11%.

Sick time for employees was reduced by approximately 50% per employee, compared to prior City averages and time lost to accidents decreased by 87%. Overall payroll expenses were cut 46%.

Gallons treated from independent septic haulers increased approximately 33% over last year, with increased marketing to eligible companies by WREP staff. Increased net revenues are split evenly between the City and WREP. The Beneficial Solids Reuse Study may also identify additional revenue opportunities for the City.

Capital Improvements

During 1994, WREP completed the scheduling and prioritization of capital improvement projects for both facilities. Because of WREP's expertise in wastewater treatment, their analysis was instrumental in assisting the City with reprioritizing projects and developing a more effective capital improvement projects list.

WREP's considerable clout in the world market resulted in immediate action by manufacturers to develop cost-effective solutions to correct several major equipment problems. Before the company stepped in, the City had difficulty in negotiating a satisfactory compromise with the suppliers. In some cases, existing equipment had never worked to design specifications. The company worked with manufacturers to repair belt filter presses, cake pump seals and progressing cavity pumps which would have otherwise resulted in the City paying for new capital replacements instead of negotiating the simple repairs.

Several studies are also underway which will affect capital decisions, including studies on disinfection methods, biosolids reuse, and odor control. Study results and recommendations are expected in 1995. The reports will provide the City with a detailed range of options for future capital expenditures and will allow for better use of City resources to keep the facilities in top operating condition.

The Future:

Working with Lyonnaise des Eaux, WREP is finalizing the arrangements to establish the Indianapolis International Centre for Training and Development at the Belmont site. The

Center will offer the latest technology and management techniques in the wastewater industry. In March, 75 leading corporate officials from Lyonnaise will visit Indianapolis to participate in a five day conference and officially dedicate the Training Centre. The conference is preceded by a 10-day training session on technical aspects of the wastewater industry for additional Lyonnaise staff. WREP and its partners will work collectively to promote the Centre as a viable resource, further securing Indianapolis' place as an international leader in the wastewater industry.

City 1993
WREP 1994

	City	WREP
Annual O&M*	$30,129,918	$17,576,762
Employees	328	176
Effluent	7 exceedences	1 exceedence

*$30,129,918 was the original 1994 AWT City budget, while the actual 1994 AWT spending was $17,576,762

WREP Effluent Performance Score Card

		CITY (1/89-12/93)	WREP (2/94-1/95)	
Permit Exceedances (1)				
Number/Year		7	1	Better
Average Concentrations (2)				
Fecal (#/100 ML)		86	51	Better
NH3		1.1	1.1	Equal
TSS (mg/L)		6	4	Better
BOD (mg/L)		6	7	Equal
Wet Weather				
Total Days/Year	CSO/RAW	47	25	Better
	Primary	78	62	Better
Total Hours/Year	CSO/RAW	415	150	Better
	Primary	881	416	Better

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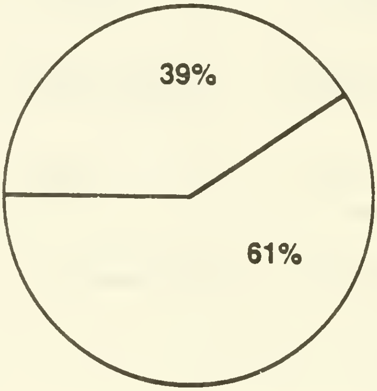
(1) WREP permit exceedance for cyanide. AWT plants not designed for cyanide removal.
(2) "Equal" results are within standard deviation of test accuracy in these ranges per "Standard Methods" for the examination of Water and Wastewater, 18th Edition.

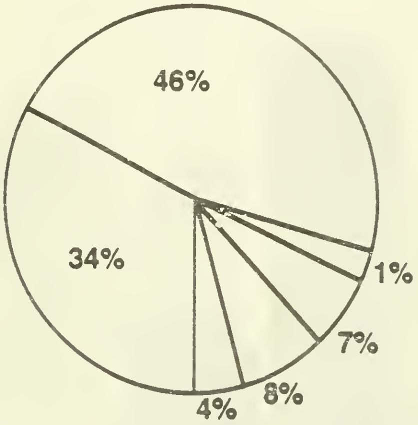
2/28/95:tma

WREP Employee Transition



Total City AWT Workers	322	
Total interviewed by WREP	317	
Total City workers hired by WREP	196	(61%)
Displaced Workers	126	(39%)

Displaced Workers - 39%



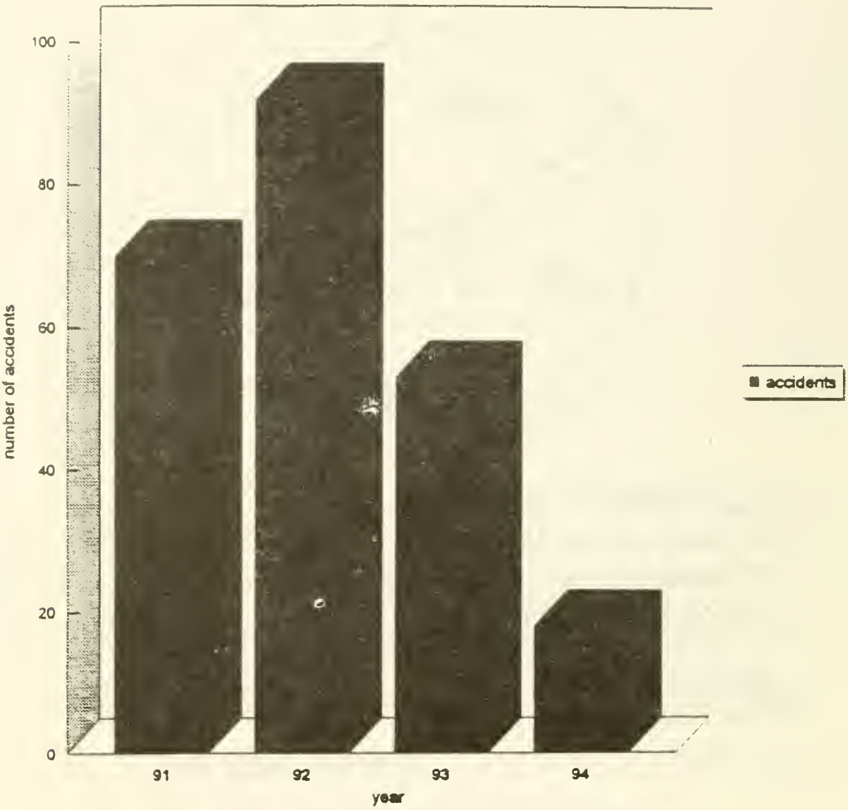
PLACEMENT OPTIONS

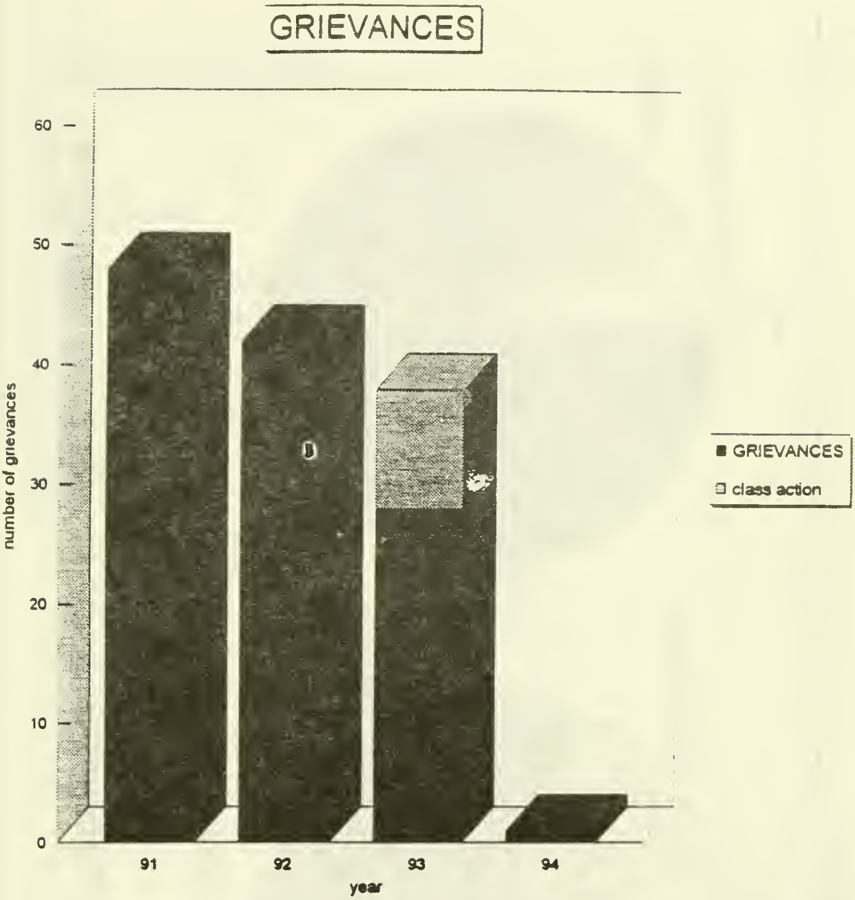
City Hires (Safety Net)	58	(46%)
Outplacement Assistance Program	43	(34%)
Outside Employment	10	(8%)
City Hires (prior to 2/15/94)	9	(7%)
Retirement	5	(4%)
JMM Hires	1	(1%)

TOTAL PLACEMENT 100%

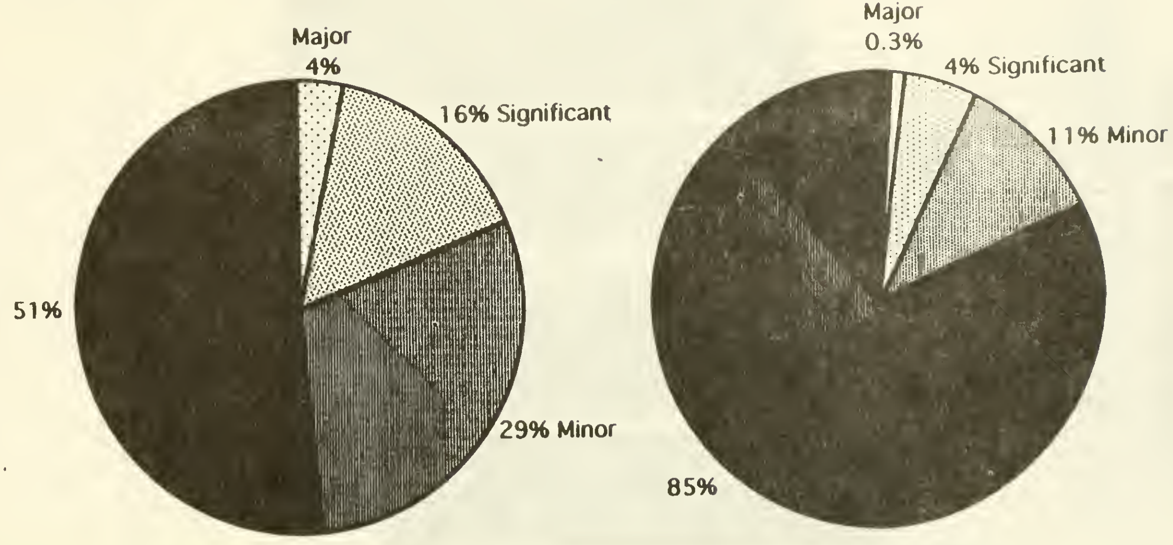
RISK MANAGEMENT

NUMBER OF ACCIDENTS PER YEAR




GRIEVANCES
60
50
40
30
20
10
0
number of grievances
91
92
93
94
year
■ GRIEVANCES
□ class action

AWT Facilities
Vibration Analyses Status



February 1994

January 1995

Overall Vibration Problems Reduced By 70%

First Year Savings

Projected

1993 costs	$30,129,918
1994 costs	$19,333,270
	$10,796,648

Actual

1993 costs	$30,129,918
1994 costs	$17,576,762
	$12,553,156

WHITE RIVER ENVIRONMENTAL PARTNERSHIP

IWC Resources Corporation • JMM Operational Services, Inc. • Lyonnaise des Eaux-Dumez

An Open Letter to the Citizens of Greater Indianapoli

January 17, 1994

Over the past several weeks, numerous reports have circulated regarding the City of Indianapolis contracting the management of its two Advanced Wastewater Treatment (AWT) plants. After an extensive study and proposal process, a contract was awarded to the White River Environmental Partnership to manage these two facilities. IWC Resources Corporation, parent company of the Indianapolis Water Company, is the Partnership's majority owner and its managing partner.

Some parties have questioned numerous aspects of the agreement, as well as the integrity of the Partnership and its entities. The following questions and responses address key issues of this endeavor.

■ ***How much money will Indianapolis taxpayers save under the Partnership's agreement, and what impact will this have on sewer rates?***

This public/private partnership-the largest of its kind in the country- will save taxpayers $12 million in 1994 and more than $65 million over the contract's five years. Operating savings of $55 million will result primarily from staff reductions, reduced utility costs, and implementing state-of-the-art cost controls and information technology. Capital investment savings will total $10 million during the five-year contract.

The Partnership understands sewer rates will not increase in 1994, avoiding a previously anticipated increase if the City had not decided to contract management of the AWT plants. The Partnership's responsibility involves only operations and management of the tow AWT plants. Sewer rates and sewer extension potential will continue to be the jurisdiction of local government.

■ ***What is the status of the current management and employees of the AWT facilities under the Partnership's management?***

The City and the Partnership have developed a comprehensive plan to place the excess AWT employees: 1) the City has re-opened its Early Retirement Incentive Program for AWT bargaining unit employees, 2) the Partnership will offer 30 positions to AWT employees in the operating companies of the partners, 3) the City is making every effort to place 40-50 employees not offered jobs by the Partnership into existing vacant positions, and 4) employees not offered comparable positions with the City or the Partnership will be presented and extensive package of job placement services.

■ ***Is the Partnership hiring all its employees from current AWT employees or will people be hired from outside Indianapolis?***

The partnership is hiring as many of the current AWT employees as possible. Of necessity, some selected positions may be filled by individuals outside Indianapolis.

■ ***What is the Partnership's commitment to protection of the environment and the safe discharge from the AWT plants into White River?***

The Partnership pledges to maintain and work to enhance the quality of the discharge under all permit requirements by the State of Indiana and the U.S. Environmental Protection Agency (EPA). We will continue using the current disinfectants- ozone and chlorine- while studying the safest and most cost-effective means of future operations.

The Partnership, which includes IWC Resources Corporation and the Indianapolis Water Company, is totally committed to protecting the environment. Indianapolis Water Company has never violated or been cited under its permits or any other environmental regulations.

■ ***What is the Partnership's commitment to the economic development of Indianapolis?***

The Partnership is headquartered in Indianapolis as an Indiana partnership, which will result in local economic growth. It will pursue other major water and wastewater projects in the five-state region of Indiana, Michigan, Ohio, Kentucky and Illinois.

The Partnership also is committing $1 million over the next five years to operate an international, cutting-edge wastewater treatment training and research center in Indianapolis. We also will contribute 5% of our pre-tax profits to Indianapolis community charitable and cultural organizations.

It is our goal to purchase 15% of our operations requirements from minority business and 3% from companies owned by women.

The Partnership entered into this enterprise with a commitment toward the best interest of the City of Indianapolis, its citizens, and the opportunity to provide an international model for the wastewater management industry. We are excited and prepared to achieve this goal. You have our commitment.

The White River Environmental Partnership

IWC Resources Corporation • JMM Operational Services, Inc. • Lyonnaise des Eaux -Dumez

Partnership with French conglomerate to provide wastewater treatment center

By Peter Key
STAR STAFF WRITER

Indianapolis may never become as well known for wastewater treatment as it is for race cars, but it won't be because of Lyonnaise des Eaux S.A.

The giant French conglomerate is one of three members of the White River Environmental Partnership, which has been running Indianapolis wastewater-treatment facilities under a five-year contract since January 1994.

As part of its efforts to help the partnership win the contract, Lyonnaise des Eaux pledged to spend $1 million to establish a training and development center for the wastewater-treatment industry.

The center's building is still being readied at the partnership's Belmont treatment facility. But its first group of trainees on Wednesday completed a seven-day session on dealing with problems at wastewater-treatment plants.

The partnership has agreements with Indiana University and Purdue University to develop training courses and do research at the center. Working with the schools will enable it to combine academic theory with field experience.

"We need a combination of academical, theoretical research . . . with the applied approach," said Patrick Cairo, vice president of Lyonnaise des Eaux's North American Water Services.

In addition to Lyonnaise des Eaux, the White River Environmental Partnership includes majority owner IWC Resources Inc., the Indianapolis Water Co.'s parent; and JMM Operational Services Inc., a Denver-based joint venture between Lyonnaise des Eaux and Montgomery Watson, a Pasadena, Calif.-based engineering firm.

The partnership took over the operation of the Indianapolis wastewater-treatment facilities as part of Mayor Stephen Goldsmith's efforts to privatize city services.

The transition wasn't without controversy, most notably with the union that represents workers at the treatment facilities.

But Goldsmith on Wednesday told a group of Lyonnaise des Eaux managers that the privatization effort has established a "different standard for the management of public entities in this country and around the world."

Lyonnaise des Eaux is promoting it, too. It's holding its annual meeting of managers of its worldwide subsidiaries in Indianapolis and has made wastewater treatment the theme for the meeting.

Many other U.S. municipalities are looking at the possibility of hiring private companies to manage their treatment facilities, too. So Lyonnaise des Eaux knows doing a great job here could bring it a lot of revenue.

We want "to make this a role model," said David R. Sherman, project manager for the White River Environmental Partnership.

Lyonnaise des Eaux is a multinational conglomerate with subsidiaries in a wide range of fields, including water treatment, construction and communications. It posted $17.4 billion in revenue in 1993.

Star Staff Photo Kelly Wilkinson

CULTURAL EXCHANGE: Jean-Marc Pinou (right) translates a question for one of his colleagues with the Lyonnaise des Eaux during a White River Environmental Partnership training session at the University Place Conference Center Downtown. Next to Pinou is Francois Virloget, a lecturer at the session.

THE INDIANAPOLIS STAR
3/23/95

Wastewater plant privatization has been a success, mayor says

By Kevin Morgan
STAR STAFF WRITER

The privatization of the city's wastewater treatment operation is resulting in cleaner water and greater efficiency than its proponents had promised. Mayor Stephen Goldsmith told the City-County Council on Monday.

The two plants. under private management since January 1994. are operating with slightly more than half the employees they had under the city Department of Public Works.

The plants remain under city ownership.

The smaller payroll and other operational changes saved the city more than $12 million in 1994. Goldsmith told council members in a report on the first year of operation under private management.

Those savings are slightly ahead of what Goldsmith had predicted in urging the privatization.

Water quality has not suffered. he told council members.

At no point in 1994 did environmental authorities cite the plants for exceeding permitted levels of conventional pollutants.

Before that. the plants had gone through a full year without such a citation only once. Goldsmith said.

A consortium led by an Indianapolis Water Co. affiliate has promised more than $65 million in savings during the first five years of privatization.

Asked by a council member how the administration intended to use the savings. Goldsmith said more money might be put into the massive infrastructure-renewal program.

But he added that the decision ultimately would rest with the council. which has control of the city budget.

THE INDIANAPOLIS STAR

3/21/95

Privatized wastewater plant is a success, Goldsmith says

By KEVIN O'NEAL
The Indianapolis News

Mayor Stephen Goldsmith believes one of the city's privatization projects has been a success.

"The taxpayers have clearly won," he said.

The Indianapolis mayor appeared before the City-County Council Monday night to comment on the first anniversary of the transfer of the city's wastewater treatment plants to the White River Environmental Partnership.

The sewage plants are operated by a partnership of IWC Resources Corp., JMM Operational services of Denver and Lyonnaise des Eaux, a French water company.

Goldsmith said the treatment plants cost less to operate under private management. The city had planned to spend $30.1 million on the facilities in 1994, but actual spending was $17.5 million.

Much of the savings came from cutting the number of workers from 328 to 176. The mayor said the remaining workers receive higher pay and benefits than they would have gotten from the city. Most of those who lost their jobs at the plants found new work with the city or with private business.

The director of the Department of Public Works reported that the privately operated plants had less trouble with sewage treatment than under government operation.

"The water quality has been equivalent or better than we enjoyed historically," said Mike Stayton.

He said the water treated by the plants exceeded pollution limits only once in 1994 — when cyanide was dumped into the sewer system.

The city will try to prevent future fish kills.

Goldsmith said last year's fish kills in White River south of the treatment plants were not caused by the plants. They were caused by overflows in the storm and sanitary sewer system which in turn depleted the oxygen in the river.

City officials plan to reduce the overflows after heavy rains by rebuilding portions of the sewer system.

The council on Monday night approved $1 million to pay for the first 50 sewer overflow construction projects.

In other business, the council approved an anti-crime appropriations for the near Westside. A $621,992 grant from the U.S. Justice Department will be spent on a "weed and seed" program to improve law enforcement and social programs in the Haughville, Hawthorne and Stringtown neighborhoods.

"We need to show the neighborhood that crime doesn't pay in this area and make the neighborhood feel safe," said council member William Dowden.

The council also approved $13.3 million for street paving and sidewalk replacement projects. The proposals include more than 170 street projects.

Some of the money will go to pay for the redesign of I-70 past Indianapolis International Airport.

Indianapolis News
3-21-95

Summer sewage jobs are short on glamour, long on experience

By Rebecca Buckman
STAR STAFF WRITER

Working at a sewage treatment plant isn't exactly the kind of glamorous summer employment most teen-agers dream of as their first job.

But for 21 Arlington High School students who served as interns for the White River Environmental Partnership this summer, it was an eye-opening — and certainly odoriferous — way to earn money and learn skills relevant to their future careers.

"You hear dire predictions of 'Students are not prepared' or 'They're not ready for today's work force,'" said Lou Ann Baker, the partnership's spokeswoman and one of the coordinators of the intern program. "Our response to that is, we'll take a role."

This partnership did that for the second consecutive summer by hiring Arlington students to work at the Belmont Street waste water treatment facility for $6 an hour. The partnership is a private consortium that has run the plant for the city since February 1994.

The nine-week internships, which ended last week, put students to work in settings ranging from labs to warehouses to offices.

Some positions were geared toward students headed to college and careers in science; others catered to those who might move straight into the work force or to a vocational training program.

Wendy Cagle, a 15-year-old Arlington sophomore interested in a medical career, worked in one of the plant's labs this summer. Among other skills, she learned to take oxygen readings of waste water and test it to determine how many solid particles remained in the liquid after various stages of treatment.

Her skills clearly impressed one of her supervisors, lab technician Bob Willoughby. "I would hire her in a minute," he declared.

Another intern, Patrick Love, performed lab work in another part of the plant. But he also had the unenviable task of occasionally checking the levels of sludge pumped into huge outdoor tanks.

Patrick, 17, did this by donning his company-issued hard hat, lacing up his clunky work boots and sticking a long plastic tube into a tank. He then removed it, noting the location of the sludge line.

See **JOBS** Page 2

Indianapolis Star
8-14-95

JOBS

Continued from Page 1

Patrick, who will head to Wabash College this fall, said he preferred his work in the lab, which allowed him to put the concepts he learned in high school chemistry class to practical use.

And while he didn't mind performing some of his less nasally pleasing duties, he admitted the plant wasn't always the most pleasant place to work.

"When it's humid? Ooh, (the smell) just lights up the place," he said.

Overall, however, Patrick and the other Arlington students said they appreciated the chance to have summer jobs that carried real responsibility.

Many other Indianapolis Public Schools students also benefit from summer work programs. For years, Pro-100, a program sponsored by the Glick Foundation and the Indianapolis Network for Employment and Training, has put about 100 IPS students to work landscaping public golf courses and school district sites.

J. Beard Management, a construction management company, encourages its contractors to employ district students.

But the relatively new, very structured White River program does boast some unique features.

Starting this year, for instance, students attended two-hour career-awareness seminars each Friday. That theme will carry over into the coming school year, when the White River partnership will help a group of Arlington teachers implement a new "career curriculum" in their reading, English and keyboarding classes.

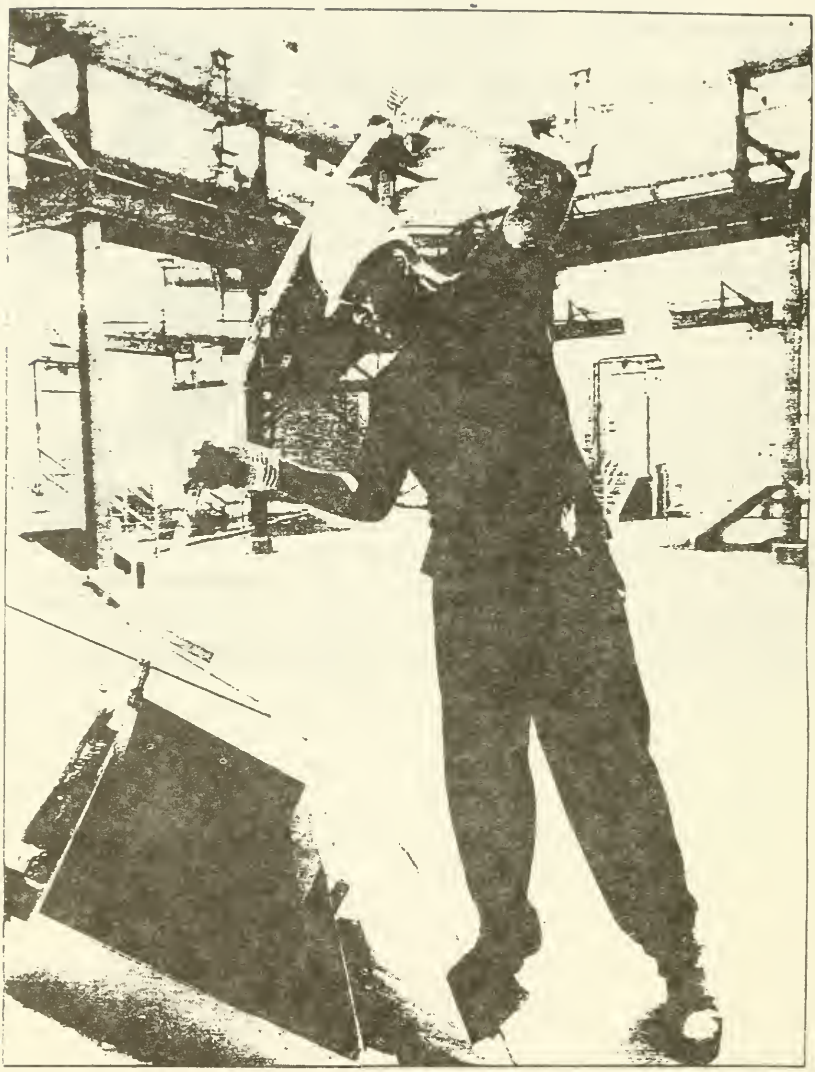
Finally, the program stresses parental involvement by requiring parents to sign off on their children's job applications. Parents also were invited to the program's kickoff dinner in June, where they worked out car-pooling arrangements to get the students — many of whom live on the Eastside near the school — to the Southside plant.

David Sherman, the partnership's project manager, says his company will continue to focus on helping Arlington students, although he hopes other community businesses will become involved with other schools.

"We really believe that it's going to take a lot to (turn) the school system around," Sherman said. "It starts at home, but companies have to play a part, too."

Star Staff Photo / Susan Plageman

HANDS-ON LEARNING: Intern Wendy Cagle tests waste water samples for their levels of solids under the supervision of Bob Willoughby.



Star Staff Photo Susan Plageman

DIRTY WORK: Although he performed some lab work this summer, high school student Patrick Love also measured sludge levels as an intern at the waste water treatment plant.

Privatization Watch

Reason Foundation, 3415 S. Sepulveda Blvd., Suite 400, Los Angeles, CA 90034

No. 221 / May 19

Competition Success!

Indianapolis Wastewater Contract Praised by Public Officials

On March 20, 1995, Indianapolis Mayor Stephen Goldsmith addressed the city council on the first year anniversary of the contract. Following are excerpts of the remarks of the mayor and of responses by several city councilmembers.

I want to make a special report on the largest competition innovation the city has undertaken thus far: the wastewater treatment plant contracting that was jointly done by both representatives of the city council and the mayor's office. On the first anniversary of this transaction, let me say that this project falls under the rubric of a competition success.

First, thanks to the council for your support of this effort. Let me just do a minute of history. Before we started this process, our plants were among the most efficient in the country. According to an Ernst & Young's study, we could save approximately 5 percent more through additional efficiencies. We moved this service into the marketplace and attained bids from around the world. A review committee composed of Councilors and city officials then selected IWC, JMM, and Lyonnaise from Paris to form an innovative partnership called White River Environmental Partnership (WREP), who presented a contract that will save us $65 million. One year later, we are here to report that we will save a little bit more than the $65 million originally projected.

Under the WREP management agreement, some really remarkable things have been done. First, the benefit package offered by WREP is better than the one offered by the city. Much is often made of the fact that privatization reduces the salaries and benefits of the employees involved. This is obviously not the case in this transaction. In a wonderful joint partnership WREP recognized AFSCME as the bargaining agency, one of the first private-company AFSCME transactions, at least in this state.

Some on this city council were concerned about what would happen to the employees who were displaced. We are happy to report that 53 percent of all public employees were hired by the city through a safety-net program and placed in other job openings, and 34 percent were successfully retained in private enterprise.

We asked the joint partnership to exceed the minority and woman business goals of the city of Indianapolis. They are on target this year to approach 25-percent minority and woman business goals, which exceed the city's rate by a substantial margin.

If you add these things together, we have one of the most extraordinary competition success stories in the world. We have saved taxpayers over $65 million. We have water quality that is better now than it was ever before. We have capital programs in the plant that are unmatched in terms of capital reserves and restoration. We have employees with salaries and benefits better now than they were with the city. And we have found jobs for displaced employees and increased participation for our minority and women businesses. The citizens and taxpayers of Indianapolis have also won in terms of water quality or any other standard.

Councilor Beulah Coughenour

I, too, would like to congratulate Mayor Goldsmith for his vision in this. I would like to congratulate WREP for the way they have exceeded our expectations. It has been really terrific.

Councilor Mary Moriarty

I would also like to thank WREP and JMM enterprises for the wonderful job they have done. I was very pleased to serve on the review committee. I was especially pleased with the manner and way in which they worked with the AFSCME employees.

Continued on Page 2

Indy Sewage Contrac is a Success

After assuming the operation of Indian apolis' wastewater facilities in January 3 1994, the White River Environmental Partne ship (WREP) has been successful in lowerin costs and increasing quality of service.

When Indianapolis finalized the contrac the city expected to save a little more than $6 million over 5 years. Today, WREP is we ahead of schedule, saving an additional $1 million in 1994. The contractor has achieve these savings by centralizing planning, computerizing maintenance, consolidating inventory, and improving response time t vendors—which resulted in additional cos discounts for prompt payments.

[illegible]

	City	WREP
OM&M Budget	$30 M	$17 M
Effluent Violations	7	1
Employee Grievances	38	1
Public Employees	322	196

There has also been a drop in employee grievances filed last year. "Amazingly enough, grievances dropped from 38 in 1993 to 1 in 1994," said Goldsmith in a recent speech to the

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Indianapolis Officials Praise Wastewater Plant

Continued from Page 1

Councilor Carlton Curry

I think this is a tribute to those who operate the plant at a substantially lowered he count in a safer manner with more income for those who are there, and a general benefit the citizens of Marion County and those downstream as well.

Council President Dr. Beurt SerVaas

With all the gloom and doom in the media today, and all the challenges we face everyda it is really wonderful news that this venture has worked in the way you have so eloquent detailed it. The [privatization] has worked beyond our fondest expectations so much that folk from distant places are coming to see and believe with their own eyes what is happening think the council is behind this and we look forward to new victories on this front.

WREP Improves Treatment Facility

Continued from Page 1

city council (see above article). Employee morale has been high, due in part to tuitio reimbursement programs and better on-site safety training, which reduced employee acciden by 70 percent. WREP has also succeeded in increasing minority and women business participatio substantially exceeding the city's 25- percent goal by the end 1995.

Water quality has also improved since WREP took over. When the city operated the plant there were seven effluent exceedences, and last year there was only one. Public Works Direct Mike Stayton told the *Indianapolis News*, "The water quality has been equivalent or better tha we enjoyed historically." Stayton stands behind the contractors since WREP has been exonerate of any responsibility for two fish kills on White River last fall (see last month's issue). According to the Indiana Environmental Institute, the culprits were an unusually large amount of rainfall an the inherent design of the sanitary sewer system. City authorities have not yet decided on how t prevent such occurrences in the future.

Project Profile

INDIANAPOLIS ADVANCED WASTEWATER TREATMENT FACILITIES

City of Indianapolis, Indiana

The White River Environmental Partnership (WREP) currently manages the nation's largest contract operations and maintenance project. WREP, a partnership of JMM Operational Services, Inc; Lyonnaise des Eaux; and IWC Resources, Inc., provides a staff of 180 to manage, operate and maintain the City of Indianapolis' 125-MGD Belmont and Southport Advanced Wastewater Treatment Facilities.

The five-year, $72 million contract between the City and WREP, began in January 1994. For Indianapolis, the project is the culmination of more than a year of work, study and preparation and will save taxpayers more than $65 million over the life of the contract.

As the Partnership's operating partner, JMM provided eight employees, including the Project Director, Project Manager, Assistant Project Manager and other supervisory-level employees, to oversee the activities of the employees hired by the Partnership at the start of the contract. During the first few months of the contract, WREP also managed a displaced worker assistance program, helping counsel and place former City employees not hired to work at the facilities in other positions within the Partnership, the City and the community.

The Belmont and Southport plants use two-stage biological-roughing filters and pure-oxygen activated sludge treatment combined with final effluent filtration to attain advanced tertiary effluent quality limits.

In addition to contract operations and maintenance services, WREP's partners are providing engineering and operational expertise in several key areas of long-term planning, including the evaluation of disinfection alternatives, sludge disposal and reuse alternatives, wet weather operation optimization, odor control program improvements and distributed control system replacement. The Partnership also is responsible for providing program management services to assist the City with its planned capital improvement projects, estimated at over $40 million over the next five years.

The first year of operation cut former City costs by 40%, produced savings of $12.5 million, reduced employee accidents by 70%, and decreased effluent violations by 86%.

FAST FACTS

Scope of Services	Contract Operations & Maintenance
Facilities	250-MGD combined capacity Belmont and Southport Advanced Wastewater Treatment Facilities
Treatment Processes	Two-stage biological-roughing filters, pure-oxygen activated sludge treatment and final effluent filtration
Contract Size	$72 million over five years
City Savings	Estimated at more than $65 million over contract life

American Federation of
STATE, COUNTY, *and* MUNICIPAL *Employees*
AFL-CIO
INDIANA AFSCME COUNCIL 62
1422-24 N. PENNSYLVANIA STREET, INDIANAPOLIS, INDIANA 46202
PHONE: 632-1432 - AREA 317

August 17, 1995

National Council for Public Private Partnerships
[redacted]
1010 Massachusetts Avenue, N.W., Suite 350
Washington D.C. 20001

Dears Sirs and Madams;

AFSCME Council 62 currently represents the employees working for the White River Environmental Partnership at the city of Indianapolis' advanced wastewater treatment plant and has done so since its' inception. The relationship between the parties started almost two years ago with much apprehension following a bitterly contested effort on the part of the union to prevent the privatization of the plant.

Through open and honest communication and a direct relationship with the facility's upper management, we have developed a dramatically improved relationship. I can honestly say that I never thought I would be in the position of now endorsing the public/private partnership which now exists between the city, WREP, and AFSCME Council 62.

Working together with WREP, the parties have not only negotiated a new successor agreement which was overwhelmingly ratified by the employees, but also:

- Established a new career ladder for employees providing skill enhancement and salary improvement opportunities;
- Eliminated frozen job salary rates;
- Minimized the use of outside contractors through employee training programs;
- Offered employees the opportunity to participate in the company's programs, nation wide;
- Established a new pride in their work force through employee involvement and empowerment programs.

The effort hasn't been easy, but some thing worthwhile seldom is. We look forward to continuing to work with WREP in improving the working lives of it's employees and the quality of life for our citizens.

Sincerely;

Stephan Fantauzzo
Executive Director

SF/le

Statement of the Water Environment Federation[1]

As leaders in the effort to enhance the quality of our nation's waters for more than 60 years, the Water Environment Federation (WEF) is pleased to have this opportunity to provide our perspective on future directions for our national water quality program.

The Clean Water Act has served the Nation well. States and communities across the country have benefited from significantly improved levels of water quality. Public support continues to be strong for protecting water quality. A recent Money magazine poll found that clean water was the No. 1 factor its readers considered when determining a place to live, ahead of crime, education, and taxes.

However, the CWA has not been reauthorized in almost 10 years. Some of the Act's provisions, dating back to 1972, need to be modernized or reoriented to address the most significant problems of 1995 and beyond. Resolving remaining water quality problems, particularly those related to wet weather flows, will require different approaches than those taken in the past. This is why reauthorization of the Clean Water Act is needed now. Failure to reauthorize the CWA in a timely manner will mean a missed opportunity to provide States, local governments and the private sector with a legal and regulatory framework that will allow them to them address water quality needs in a scientifically sound and cost-effective manner. It also will mean continued uncertainty surrounding future funding for needed environmental infrastructure.

WEF appreciates the bipartisan leadership of the Environment and Public Works Committee on Clean Water Act (CWA) issues. We are encouraged by recent actions taken by the committee in reporting out unanimously a Safe Drinking Water Act reauthorization bill that passed the full Senate 99–0. WEF believes that a similar bipartisan, consensus-based effort is possible for CWA reauthorization, and we look forward to working with the committee to achieve this.

At the beginning of the 104th Congress, WEF identified five priorities for Clean Water Act reauthorization:

1. Set priorities for remaining water quality problems;
2. Ensure all national clean water programs are based on sound science;
3. Encourage new water quality research;
4. Orient the CWA around management of water quality on a watershed basis; and
5. Continue the Federal Government's role in providing financial assistance.

Each of these five priorities was reflected in some way in legislation approved by the House. Unfortunately, the House legislation contains provisions which the U.S. Environmental Protection Agency (USEPA) and others believe would actually lead to a decrease in water quality protection. WEF members hope that the Senate, as it has done in the past, will be able to forge a consensus on improvements to the Act that will allow flexibility in addressing remaining problems without threatening the gains made over the past two decades.

This statement will cover issues identified by the Committee as topics for this hearing: urban wet weather (CSOs, SSOs, and stormwater), Federal funding (including SRF reauthorization), and privatization. Details on our five priority positions are also attached.

BACKGROUND: URBAN WET WEATHER CHALLENGES

Runoff from urban and rural sources now accounts for the majority of water quality impairment reported to USEPA by the States. WEF supports USEPA's emphasis on the watershed approach for addressing surface water, groundwater and other ecosystem issues. The watershed approach is an effective method for assessing the relative importance of individual pollution sources within drainage areas and prioritizing efforts for water quality improvement. Urban wet weather programs should provide water quality and environmental benefits that are recognizable to the public at a cost that is affordable. WEF urges the application of watershed management principles to the evaluation and control of urban wet weather water pollution sources, including combined sewer overflows (CSOs), sanitary sewer overflows (SSOs), and urban stormwater. The USEPA Urban Wet Weather Advisory Committee, of which WEF is a member, offers an opportunity to develop such an integrated approach, and we encourage the committee to support this effort.

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[1] The Water Environment Federation (WEF), founded in 1928, is the world's leading organization of professionals dedicated to preserving and enhancing water quality. Our 44,000 members, including engineers, scientists, wastewater treatment plant operators and managers, and others working in State and local government, Federal agencies, academia, industry, and private practice, are the practitioners involved directly in protecting public health and restoring water quality.

Wet weather discharges have certain basic characteristics which must be considered in evaluating water quality impacts, costs, and effectiveness of control measures:

- Wet weather discharges are intermittent, usually short in duration, and most often occur of the discharge is almost always much shorter than the interval between discharges.
- Wet weather discharges can be frequent or rare, depending on the local climate.
- Water quality and environmental impacts from wet weather discharges are site- and drainage basin-specific.
- Wet weather discharges usually contain elevated concentrations of suspended solids (both organic and inorganic), and pollutants are often in particulate form. As a result, the bioavailability and fate of toxicant and other pollutants may be substantially different than those associated with point source discharges.
- Flow volumes, pollutant concentrations, and associated pollutant loads from wet weather discharges are highly variable. This variability is observed among discharge sites in a watershed and between storm events at an individual discharge site in which the toxicants and other pollutants are in soluble form.
- The costs for control and/or treatment of wet weather discharges are high relative to point source discharges. Control technologies also are less effective than those available for point sources. Retrofitting existing facilities can be costly, or even impractical or impossible.
- In many locations, the receiving waters impacted by point source and wet weather (nonpoint source) discharges overlap.
- Significant wet weather discharge impacts may result from hydraulic impacts (flow volume) rather than the effect of pollutants.

These characteristics make generalized approaches for wet weather controls difficult. Some potential consequences of these wet weather discharge characteristics are:

- As a result of urban drainage, runoff peaks and volumes have increased significantly in receiving waters so that in many cases—especially in streams—the quantity of the runoff itself is responsible for the ecosystem debilitation.
- It can be difficult to quantify water quality and environmental impacts from wet weather discharges, and the effectiveness of control programs. Thus, remediation programs may not produce anticipated results.
- Because of the potential for large flows, controlling wet weather pollutant inputs is very costly and overflows of untreated or partially treated discharges must be anticipated. Cost also increase when controls are retrofit into older sewerage systems.
- The water quality and environmental benefits from point source control programs may be diminished in water bodies that are impacted significantly by uncontrolled wet weather discharges.
- The beneficial effects of dilution and the complicating impacts from habitat, sediment, and other impairments often overshadow potential benefits of wet weather controls.

Recommendations

In light of the characteristics and associated consequences of wet weather discharges, WEF recommends that any national program to address wet weather issues reflect the following elements:

1. *Watershed basis:* National legislation or regulations should allow and encourage States and local governments to address wet weather impacts on a comprehensive, watershed basis. Watersheds can be segmented and/or nested to accommodate boundaries of existing governmental entities. Impacts and control costs for wet weather discharges should be assessed on a watershed basis so that effective programs and expenditure priorities can be established. Impact and cost control assessments must include runoff quantity, not just quality.

2. *Local control:* Local units of government should have the primary role in identifying problems, establishing priorities, and implementing controls. Legislation or regulations should facilitate and require joint actions by existing authorities who are dischargers, flood control agencies, and/or water users within a watershed, and also facilitate coordination between adjacent watershed segments where there are overlapping impacts.

3. *Phased implementation:* Local authorities should develop phased implementation programs for control of the adverse effects of wet weather discharges. An iterative, adaptive approach should be utilized. Control programs should build on successful approaches to water quality improvement. They should include short and

long term goals and should provide continuous tangible progress toward practical and attainable water quality and environmental goals.

4. *Tangible improvements:* Legislation and regulations should consider the rate of progress, affordability, and feasibility of obtaining tangible improvements in water and/or environmental quality in evaluating strategies developed by local governments.

5. *Affordability:* Expenditures by local governments and the private sector will by necessity be extended over substantial periods of time. The rate of expenditures should be determined by the magnitude of water quality and environmental impacts, the historical experience with sanitary and storm sewer maintenance needs, and the total range of priorities in the watershed. The rate of expenditures for wet weather controls should not impact significantly the ability of local governments to provide other services and functions consistent with local priorities. It should be recognized that in some cases it may not be possible to attain water quality standards and associated designated uses at an affordable cost.

Water Quality Standards

WEF recommends that the Clean Water Act be amended to require development of new criteria and standards that recognize the intermittent nature of wet weather flows, hydraulic impacts from high volume flows, and the impacts from upstream contributors on local wet weather stream conditions. Existing State water quality standards typically are inadequate for addressing wet weather conditions. The Act should clearly allow for development of watershed-based wet weather standards which reflect reasonable efforts to allow for intermittent and minimum deviations of stream criteria due to wet weather discharges. Standards and USEPA developed criteria should reflect accurately the impact of discharges on a receiving water and the ecosystem during and immediately after a storm event or snowmelt, and should use narrative standards as appropriate to recognize the highly variable impacts of wet weather flows, both from pollutants and from high volume flows. This approach will help to ensure that the costs of control correspond to water quality improvements attained.

Research and Monitoring

Congress should authorize funding specifically for wet weather research. Additional research is needed to fill gaps in knowledge related to quantifying the significance of sources (CSOs, SSOs, and urban stormwater), control technologies, and water quality impacts, and to provide a sound scientific basis for regulatory decisions. Research should be coordinated to the extent possible to develop a national data base to describe the impacts of wet weather discharges.

The Water Environment Research Foundation (WERF) recently initiated a multiyear $1.5 million wet weather research program in cooperation with USEPA, municipal, and corporate sponsors. The goals of this program are to:

(1) evaluate the effectiveness of various wet weather sampling, treatment and control practices,

(2) develop, test, validate and refine methods of assessing benefits to receiving waters,

(3) evaluate watershed management protocols and assess research needs, and

(4) disseminate research results and information to local governments, regulatory agencies, and the technical community.

Research on wet weather issues also is underway or planned at other agencies and institutions. Although some support has been provided by USEPA, the total amount of funding available for wet weather research is very small compared to the significant public expenditures that likely will be made for wet weather controls over the next decade.

Monitoring is needed to characterize wet weather discharges and evaluate their impacts on water quality. Selected control technologies and/or point of discharge measurements should be the basis for compliance monitoring until more reliable dynamic stream response models are developed and implemented. Appropriate characterizations at representative discharge points that are contributing to water quality degradation are necessary in order to establish a baseline for measuring future progress in meeting abatement targets. Initial monitoring data should not be used as a basis for enforcement action.

The preceding is a framework that would allow for urban wet weather issues to be addressed on a watershed basis with primary responsibility for problem identification, development of solutions, and implementation residing at the local government level. WEF also offers some specific suggestions and viewpoints on CSOs, SSOs and stormwater individually:

COMBINED SEWER OVERFLOWS

Combined sewer overflows occur when combined storm and sanitary sewerage systems, which are prevalent in older cities, receive excessive stormwater flows from streets, roof drains and other stormwater catchment systems. When the design capacity of these systems is exceeded, overflow structures direct untreated flow into receiving waters, thereby bypassing treatment facilities designed to protect water quality.

WEF was pleased to participate in the development of a national consensus-based policy to address CSOs that was finalized by USEPA in 1994. Most of the regulatory guidance to implement this strategy was finalized in 1995, and is now being utilized by municipalities to implement individual control strategies. The Water Environment Federation strongly supports the USEPA CSO policy and recommends that it be codified in the Clean Water Act. However, there are several issues which still need to be addressed:

Minimum Technology Requirements

WEF favors the establishment of a technology-based approach. This approach should rely on best professional judgment and site-specific factors. At a minimum, such an approach should contain the following elements:

(1) proper operation and maintenance of CSO facilities;
(2) effective use of existing facilities;
(3) elimination of dry weather overflows;
(4) control of settleable and floatable solids using best management practices;

Additional CSO discharge controls should be developed and implemented on a site-specific basis to meet applicable and attainable wet weather standards. National uniform technology-based standards are, in our judgment, not appropriate due to the variable nature of CSOs.

Inventory of CSO Discharge Points

Regulatory authorities and local governments should inventory all CSO discharge points. Completion of the inventory should be given high priority and should be used to develop an understanding of how overflows vary as wet weather conditions vary. Regional rainfall data, runoff models, receiving stream assimilation evaluations, and water use all should be factored into the development of technology-based CSO control programs.

Setting Priorities For CSO Program Implementation

The Clean Water Act should be amended to authorize regulatory authorities to establish a schedule for all control plans. Schedules should take into account financial capability and the relative impacts of CSOs within the watershed. Plans should be reviewed on a regular basis to ensure goals are being met.

Costs For CSO Improvements

Resolving all CSO issues on a nationwide basis to the degree required under the present CWA will be costly. Cost estimates developed by USEPA indicate $41 billion will be needed to fund CSO programs in approximately 1200 communities with CSOs. An assessment of EPA's cost projections conducted by a private firm that considers aggregation of CSO basins within municipal systems or remote application of treatment indicated nationwide costs of $90–100 billion. Other estimates based on an extrapolation of data submitted by large publicly owned treatment works (POTWs) for completed and planned CSO programs exceed $100 billion, which is a greater amount than the Federal Government has spent for Clean Water Act programs since its passage in 1972. In order to ensure success, Congress should provide financial assistance to local governments for CSO correction projects.

Compliance and Enforcement

CSO programs should be implemented through the NPDES permit program. Flexibility to address individual or regional problems should be maintained within the present system. Emphasis should be placed on preventing pollution and reducing the need for treatment. Congress should assist local governments in undertaking education and other programs to reduce the introduction of hazardous materials or other problematic pollutants into sanitary and storm systems.

In cases where appropriate wet weather water quality standards are not being met, dischargers should be required to further control CSOs. Enforcement measures should be based on targeting appropriate technology to meet site-specific needs. In locations where combined sewer systems have been upgraded, USEPA should accept the improvements as an alternative to meeting new or differing standards unless water quality and designated uses are being degraded significantly.

SANITARY SEWER OVERFLOWS

Sanitary Sewer Overflows (SSOs) occur when the capacity of a separate sanitary sewer is exceeded, normally during storm events. There are several factors that may contribute to overflows from a sewerage system, including pipe capacity, operations and maintenance (O&M) effectiveness, sewer design, age of system, pipe materials, geology and building codes.

Enforcement actions by USEPA and the States for SSOs range from requiring billion dollar programs to no involvement. Due in part to this new emphasis on SSO regulation, local governments are giving increased attention to managing the effects of rainfall-induced infiltration and inflow on their sewerage systems.

Recommendations

WEF recommends the following for prevention and control of sanitary sewer overflows:

1. Recurring dry weather overflows should be eliminated.
2. Wet weather SSOs are best managed through a watershed approach.
3. Risk assessment can be used to determine SSO control priorities.
4. Understanding the sewerage system is essential.
5. O&M related SSOs should be minimized.
6. Private property inflow/infiltration issues should be addressed.
7. Use appropriate treatment to meet water quality standards.

These principles are described in greater depth below:

Wet Weather SSOs Are Best Managed Through a Watershed Approach

SSOs must be considered relative to other water quality problems within specific geographical areas. Such an approach ensures that local governments, regulatory agencies, and other stakeholders have a clear understanding of the individual and collective impacts of all sources of pollution. Use of the watershed approach also provides a mechanism for setting priorities to control various pollutant sources and for selecting controls that achieve maximum benefit at an affordable cost.

Risk Assessment Can Be Used To Determine SSO Control Priorities

Assessment of the risks to human health and to environmental quality associated with SSOs should be foremost in the development of any national, regional, or State policy for control or abatement. Priority must be given to overflows that directly impact human health, such as basement backups and other SSOs that create the potential for human exposure. In order to accomplish meaningful assessment of risks from SSOs to human health or the environment, exposure pathways for contaminant migration from sanitary sewer overflows must be thoroughly understood.

Understanding the Sewerage System is Essential

Since complex hydraulic conditions often exist in sanitary sewerage systems during large rainstorms, isolated SSO control efforts will often simply shift the problem to an adjacent area. A thorough understanding of the performance of sanitary sewerage systems during wet weather is essential to the mitigation of rainfall-induced SSOs. Due to regional hydrogeological and meteorological conditions, problems must be evaluated on a site specific basis.

Operations and Maintenance (O&M) Related SSOs Should Be Minimized

Effective O&M programs begin with the planning and design of sanitary sewerage systems. Correct sizing of the system, the selection of materials and equipment, and thorough construction and inspection methods can help avoid permanent system deficiencies that affect the operations and maintainability of the system, as will involving O&M staff in the planning stages of each project. System records and a system inventory are essential elements of an O&M program. Rapid advances in computer technology have made the development and maintenance of data bases easier and more cost effective than ever before. Physical inspections of sanitary sewerage systems remain the foundation of an effective O&M program. An effective collection system O&M program depends on the willingness of utility managers and elected officials to recognize that costs of reactive maintenance often exceed the costs of effective and proactive O&M programs. WEF recommends the development of performance indicators for collection systems through a benchmarking process which can take into account variations in size and geographic region. This is preferable to national, one-size-fits-all O&M Standards.

Private Property Inflow/Infiltration (I/I) Sources Should Be Addressed

Private service laterals, downspouts, and area drains belonging to private residences and businesses frequently are a significant source of I/I in many cities. The overall success of an I/I correction program to reduce SSOs is limited if these private sources are not addressed. A means to overcome the institutional and legal barriers to reduce extraneous inflows from private property sources needs to be established. Education of the public is important to the success of any service lateral maintenance or repair program.

Use Appropriate Treatment To Meet Water Quality Standards

Proper planning, design, construction, and operations and maintenance should alleviate the vast majority of SSOs in a community. There may exist, however, some SSOs which are impractical to address other than through treatment. In general, biological or secondary treatment is not appropriate for wet weather flows, due to the dilute character and variable nature of the flows. WEF recommends that alternate treatment processes be considered before requiring secondary treatment of SSOs. Adverse water quality impacts associated with SSOs can be minimized without providing secondary treatment.

STORMWATER

Stormwater discharges have been documented to be a significant factor in impairment of water quality in urban areas. Unfortunately, over the past two decades we have been unable to devise a workable regulatory approach to address stormwater impacts. The 1987 amendments established a two-tiered approach, requiring permits for industrial facilities and large cities and putting off a decision with respect to what would be required of smaller cities. A USEPA advisory committee, including WEF and other stakeholders, is currently looking at the question of requirements for smaller cities. Improvements to the existing Phase I program also are under consideration.

WEF supports managing urban stormwater discharges within the framework of the National Pollutant Discharge Elimination System (NPDES) called for in the Clean Water Act. The NPDES framework provides for accountability by States and local governments in developing effective stormwater programs. However, the variability and uncertainty associated with stormwater discharges points to the need for flexibility that will allow permitting authorities latitude to consider a variety of approaches, such as best management practices. Numerical water quality standards should not be included in stormwater permits.

Control programs for all discharges, including those consisting of stormwater, must be based upon scientifically valid analyses which reflect the relative environmental benefit of a particular control strategy in comparison to other programs. In addition, the costs of a particular control strategy should bear a reasonable relationship to the expected water quality benefits. Therefore, implementation of stormwater control requirements should be consistent with other environmental priorities within the watershed.

Issues relating to permitting and control of stormwater discharges can be classified into three major categories:

1. Adequacy of existing data base to support a selected control strategy.
2. Adequacy of existing technology to monitor and control stormwater discharges.
3. Timing of implementation for any required control strategies.

Adequacy of Existing Data base

Parameters that describe the "typical" stormwater discharge for permitting and control purposes have not been defined, and, indeed, may not be definable. The issue of variability in characteristics of stormwater discharges is compounded further by the variation in water quality within the receiving water that occurs during such discharges. In the past, water quality standards have typically been reflective of conditions during low flow periods when changes in water quality would be most magnified. Stormwater discharges seldom, if ever, occur during such periods. As a result, impacts on water quality from such discharges should be assessed during the increased flows that occur during a storm event.

There is no consensus as to the "standard conditions" under which water quality impacts and the associated need for stormwater discharge controls should be assessed. The capacity of storm sewer systems is typically based on a design storm such as a 25 year storm, or a storm which has a 4 percent probability of recurring in any given year. This approach may not be appropriate for assessing the impact of stormwater discharges because there is no agreement on a suitable recurrence interval. In addition, even an agreed-upon recurrence interval may have significantly different water quality impacts in different parts of the country.

Adequacy of Existing Technology

Wastewater monitoring and treatment technology has advanced dramatically over the past two decades, driven primarily by Clean Water Act regulatory requirements.

Technology exists to undertake short-term monitoring and, in general, control the types of discharges associated with urban stormwater systems. The challenge is to further refine these technologies to insure reliable operation after prolonged periods of inactivity that can occur between storm events. In addition, discharges from storm sewers typically occur at multiple points, particularly within urbanized systems. Frequently, there is no land available at discharge points to locate control equipment. New technologies must be developed to address this challenge. Finally, the need for flow proportionate sampling as opposed to time varying sampling should be carefully assessed.

The methodology for assessing the impacts of stormwater discharges requires further refinement. Recent advances in the methodology associated with whole effluent toxicity (WET) testing and biological monitoring are promising. However, the technology and science of these methodologies and their applicability to stormwater discharges is still evolving. For example, WET testing is typically conducted for 48 and 96 hours, whereas most storm events last for only a few hours. Therefore, the ability of these tests to serve as a valid indication of the impact of stormwater discharges is suspect. Until such time as the validity, reliability, and consistency of these tests is verified, they should not be used as enforcement tools for stormwater discharges.

Timing for Implementation of Control Strategies

Both regulators (USEPA and State agencies) and the regulated community (local governments and the private sector) are struggling in their attempts to comply with stormwater regulations. Consistency needs to be brought to the program. States must have sufficient flexibility to implement requirements and standards which reflect local and regional water quality characteristics. States are in a much better position to assess the need for specific controls for discharges in specific watersheds.

Recommendations

Based on the issues and concerns discussed above, the Water Environment Federation offers the following recommendations:

1. *More data needed:* More time must be allowed to develop consistent and defensible monitoring and control requirements and to adapt existing technology to meet the needs of stormwater monitoring and control. Additional time also is required to develop a scientifically valid data base for permitting purposes. Stormwater monitoring data should not be used as a basis for determining numerical limits for discharge permits. Instead, this information should form the basis for the development of a long-term data base.

2. *Appropriate testing:* The use of Whole Effluent Toxicity testing for stormwater monitoring should be reassessed. A scientific peer review process should be instituted to assess whether the results of such testing represent an appropriate basis for requiring further monitoring and control of stormwater discharges. In addition, conditions existing in the receiving water must be considered when evaluating the potential impact of stormwater discharges.

3. *Flexibility:* States must be given the flexibility to adopt stormwater permitting requirements to local conditions. A program based on general permits with a strong data collection component should be emphasized as the way to assemble the data needed to develop effective long-term monitoring and control programs.

FINANCING TO MEET MUNICIPAL WATER QUALITY NEEDS

Federal funding is the cornerstone upon which the regulatory and wastewater treatment plant construction programs mandated by the Clean Water Act were financed. Billions of dollars have been invested to help State and local governments meet national clean water goals. Today, however, the estimated cost of municipal wastewater facilities construction needed to comply with enforceable requirements of the Act is rising even as overall Federal financial support declines. The 1994 Ernst & Young National Water & Wastewater Rate Survey found that the monthly charge for wastewater treatment had risen 18. 1 percent since 1992, while during the same 2-year period, the Consumer Price Index increased by only 6.1 percent.

Although local governments pay most of the cost for this basic public health infrastructure, a continued Federal role is needed if gains made during the past two decades are to be maintained. Funding is needed to:

(1) maintain water quality gains made since 1972;
(2) meet new clean water requirements;
(3) assist small or disadvantaged communities;
(4) adequately capitalize the State revolving fund (SRF) program; and
(5) support research and development of new technologies.

Three issues affecting POTWs have emerged since passage of the 1987 Water Quality Act:

Major Increase in Clean Water Requirements

Local governments are subject to extensive Clean Water Act requirements. These mandates require the planning, design and construction of sophisticated and expensive treatment facilities. Initial CWA requirements for municipalities included:

(1) meeting technology-based secondary treatment levels;

(2) compliance with water quality limits more restrictive than secondary treatment; and

(3) development and implementation of industrial pretreatment programs and local limits to protect water quality and wastewater treatment plant processes.

Significant new requirements were added by the 1987 amendments and subsequent regulations. These requirements include: (1) controls on chemical-specific toxics and whole effluent toxicity; (2) controls on combined sewer overflows (CSOs) consistent with USEPA's CSO Policy; and (3) compliance with NPDES stormwater permits. In addition, regional efforts such as the Great Lakes Initiative and Chesapeake Bay Program are resulting in additional requirements which may ultimately be applied nationwide.

Major Increase in Municipal Wastewater Construction/Treatment Needs

Second, these requirements led to a substantial increase in wastewater construction needs. For example, USEPA's 1992 Needs Survey reports almost $140 billion in unmet needs (excluding stormwater compliance), an increase of $35 billion in the 2 years since the last survey. The 1992 survey indicates that local governments face $26 billion in remaining costs for secondary treatment construction.

Perhaps the most significant change in the 1992 Needs Survey relate to CSOs. one of the topics of this hearing. Cost estimates for CSO controls more than doubled—from $20 billion in 1990 to $42 billion in 1992. As indicated earlier in this statement, other estimates place the nationwide cost for CSO controls much higher.

Other unreported, or as yet unplanned, construction needs exist. In particular, significant funding will soon be needed to rehabilitate and replace aging facilities. These costs are not reflected in the USEPA Needs Survey. Most of these costs will be paid by local ratepayers, leading to "rate shock" in communities of all sizes. The prospect of exponential rate increases is looming as a particular burden for small or economically disadvantaged communities.

WEF surveyed POTWs of all sizes about their anticipated spending over a 2-year period, 1994–1995. We found the total costs for ongoing treatment efforts would be about $1.9 billion for 1994 and $2 billion for 1995, with about half of this amount devoted to equipment replacement or upgrading. The following chart summarizes these costs (in millions of dollars):

Product sectors	1994	1995	Year-to-year variance (in percent)
Equipment	$966	$1,016	+5.2
Services	544	551	+1.3
Chemicals	408	418	+2.5
Total	$1,918	$1,985	+3.5

On a regional basis, the Northeast accounts for 30 percent of these costs, followed by Midwest (22 percent), Southwest (21 percent), Southeast (19 percent), and Northwest (8 percent).

These costs represent only a portion of the total operations and maintenance funding needs for the 15,700 POTWs currently operating throughout the country. When current treatment costs are extrapolated over the same 20 year time horizon as the EPA Needs Survey, and assuming a 3.5 percent annual increase, these costs will almost double to approximately $3.7 billion/year by 2014. WEF estimates that continued economic and population growth will add an additional $52.3 billion to the current new construction needs identified by USEPA.

Who will pay? A survey by the Association of Metropolitan Sewerage Agencies (AMSA) of 106 of its large POTW members found that local governments are currently paying about 84 percent of the cost of new construction to comply with the Act. Other financing sources include SRF loans (6.7 percent), State grants (0.9 percent), remaining Federal grants (7.9 percent), and miscellaneous other sources (0.9 percent). In other words, over 90 percent of wastewater treatment facility construction costs are being paid by local governments through direct local financing or loan repayments to SRFs.

WEF's survey found that the biggest source of funding for wastewater treatment equipment, chemicals and services was local user fees (70 percent), followed by bonds (9.9 percent), Federal and other funds (9.1 percent), SRF funds (8.3 percent), and other local revenues (2.7 percent). While large POTWs such as those surveyed by AMSA represent large per unit expenditures, they represent only a small portion of the total wastewater services universe. For example, the WEF survey found that total forecast spending for plants between .1 and .9 million gallons per day (MGD) was only 19 percent less than for facilities larger than 50 MGD. Thus, it can reasonably be estimated that combined new construction costs for small and medium-sized cities would approach that of all larger cities combined.

Major Increase in Demand for Improved Science and Technology

Local experience in water quality standard-setting as part of the Great Lakes Initiative, Chesapeake Bay Program, and other regional activities dramatizes the need to maintain or expand funding for scientific research needed to ensure sound, risk-based regulatory decisions and the technology needed to implement those decisions. This objective is particularly important as we move toward increased site-specific decisionmaking. The availability of appropriate scientific protocols will likely determine the success of any new watershed program.

Ironically, USEPA's innovative and alternative treatment assistance program was phased out concurrent with the end of the Title II grant program in Fiscal Year 1990. The Federal investment in the development of improved wastewater treatment technologies has been curtailed markedly since then. Local governments have been able to make only limited investments in research and demonstration studies through the efforts of individual POTWs or in collaboration with the Water Environment Research Foundation, with limited EPA participation.

Increased Federal support would make a significant contribution to development of new treatment technologies. To this end, Congress should consider allowing Federal funding to be utilized for innovative and alternative projects.

Recommendations

Federal financial assistance for clean water programs is a vital part of the partnership between Federal, State, and local governments. Considering the extraordinary sums needed, it is essential that Congress provide maximum flexibility in financing options for local governments. It is also important that there be a regulatory environment which encourages the use of creative financial mechanisms and structures which will leverage the capabilities of local governments to develop and maintain adequate wastewater treatment infrastructure .

In light of the need for continuing public and private investment in clean water programs, WEF recommends that the CWA be amended to:

1. *Continue SRF:* Continue Federal funding for the State Revolving Fund (SRF) program at the $2 billion annual level.
2. *Streamline SRF:* Make the SRF more attractive to potential borrowers by eliminating cross-cutting construction grant requirements, eliminating duplicative requirements with similar State laws (such as NEPA review), and eliminating Federal procurement and management requirements.
3. *Increase SRF flexibility:* Give States greater flexibility in deciding what types of projects are eligible for SRF assistance, provided the State has completed a comprehensive facility needs assessment and watershed management plan.
4. *Fund science/research:* Provide adequate funds to EPA and States to develop and validate ecological risk assessment protocols, watershed management protocols, and water quality criteria.
5. *Assist small communities:* Assist small communities, through streamlined loan procurement procedures, flexibility in meeting technology-based requirements, and extended amortization schedules.

PUBLIC/PRIVATE PARTNERSHIPS

Public/private partnerships (privatization) in all phases of environmental infrastructure, including financing, operation and ownership of facilities, is one option that is receiving much attention currently. These partnerships can help direct significant private sector resources to development and rehabilitation of wastewater treatment infrastructure. Maintaining or exceeding current levels of environmental and public health protection should be a key consideration in all areas of private sector involvement in providing wastewater services. An adequate system of municipal and State supervision must be established and maintained to ensure that investments and activities are sound and in the public interest.

Recommendations

WEF believes that public/private partnerships should be an option available to local governments, based on local needs and concerns. Specifically, WEF recommends that Congress:

1. *Remove barriers:* Remove legal barriers that deny publicly owned facilities access to private funds. Local governments should have the legal flexibility to recycle funds and access needed capital for water pollution control requirements through such mechanisms as private development and ownership, asset sales, sale/leasebacks, and similar arrangements.
2. *Clarify recoupment:* Clarify that the sale of existing wastewater treatment assets, constructed with Federal grants, to private parties (for continued wastewater treatment operation) will not require a return of grant moneys to the Federal Government *as long as the proceeds of such sales are used for further wastewater facility construction or rehabilitation.*
3. *Expand POTW definition:* Revise the definition of "publicly owned" facilities to include facilities owned and/or operated by private parties subject to contracts or service agreements with the municipality, *provided that such agreements provide for municipal oversight of performance and a level of service which is functionally equivalent to that which would have been provided by a municipally owned and operated system.*

CONCLUSION

Reauthorization of the Clean Water Act offers an unprecedented opportunity to evaluate our progress to date, and apply what we have learned. Remaining water quality problems are more complicated and vexing than those addressed already. Greater scientific understanding and new technologies will be needed to preserve and enhance the quality of our water. New management tools and innovative financing mechanisms will be needed. Water quality programs will have to measure up to the public's twin demands for protection of health and the environment and for more efficient government at all levels.

The Water Environment Federation urges the committee to act as expeditiously as possible on Clean Water Act reauthorization. While our comments here are directed toward municipal issues, our membership includes many other important stakeholders, such as industrial water quality control specialists, and we would be happy to provide more specific comments on industrial and other issues at a later date. We look forward to working with committee members in developing sound improvements to the Act that will ensure progress in meeting environmental protection and public health needs and that will build on, not erode, the advances made over the past 25 years.

STATEMENT OF THE NATIONAL ASSOCIATION OF FLOOD AND STORMWATER MANAGEMENT AGENCIES

INTRODUCTION

The National Association of Flood and Stormwater Management Agencies (NAFSMA) is a national organization representing flood control and stommwater agencies serving a total population of more than 65 million citizens. Many of our member agencies are now operating under the stormwater NPDES permit mandate, with some members now entering their second 5-year stormwater permit cycle.

NAFSMA appreciates this opportunity to share our views on renewing the Water Quality Act, and specifically its provisions affecting municipal separate stormwater systems. The association's membership has specific concerns regarding the provisions of the Act which mandate the permit regulation of stormwater quality. In addition, we have concerns relating to other provisions of the Act. Each of these sets of concerns are addressed in this statement.

STORMWATER SYSTEMS NPDES PERMITTING ISSUES

Background; Impossible Standard Imposed

The 1987 amendments to the Clean Water Act mandated the NPDES permitting of municipal separate storm sewer systems. During the period since enactment of the statute and promulgation of the regulations, it has become clear the stormwater rule will be the most expensive water quality regulation in the country's history.

This conclusion is produced in large part by the first hand experiences of municipalities in their effort to comply, and by the determination of EPA General Counsel that stormwater discharges must comply with adopted water quality objectives.

Many of the adopted objectives which will be applied to stormwater discharges actually exceed drinking water criteria. In fact, detailed studies have determined that even state-of-the-art treatment of stormwater discharges will not achieve such criteria.

Exorbitant Cost of Stormwater Mandate

Evidence of the exorbitant and costly nature of the stormwater NPDES permit mandate is being repeatedly confirmed. Local communities spent, on average, $654,214 per community just to complete the required two-part application process (NAFSMA Survey, Published October 1993). In total, $130,000,000 has been expended just to prepare permit applications. With your permission, we are submitting copies of both NAFSMA's June 1992 Survey on Municipal Separate Stormwater Sewer System (MS4) Permit Application Costs and the association's October 93 Survey on permit application costs and compliance application costs for the record.

The 64 agencies responding to the 1993 survey estimated that their permit compliance costs will total $1.5 to $3.2 billion dollars over the first 5 year permit term. On a nationwide basis, the Southern California Chapter of the American Public Works Association commissioned an analysis which determined that annual costs for stormwater agencies to pursue traditional water quality standards could reach $500 billion dollars.

EPA concurs in the recognition of the exceptional costs of the stormwater quality mandate. In its "1992 Needs Survey Report to the Congress" EPA reported the following:

> Costs for SW structural controls could run into tens of billions of dollars. In addition, O&M costs for the continued operation of municipal SW programs as well as O&M of control facilities are significant. These facilities are very expensive to maintain, perhaps in the order of billions of dollars per year.
>
> EPA believes the modeled estimate is responsible, considering how few of the total SW program implementation costs the model attempts to estimate. Information that would provide a basis for modeling all potential costs for implementing the SW program were not available for the first modeling effort. Further work needs to be done to develop cost estimates for structural and other management practices that may need to be implemented by many cities.

Stormwater "Problem" Not Yet Defined

Defining the urban runoff problem is severely complicated by the episodic nature of runoff, the variability in quantity and quality of flows from storm to storm at a given discharge (and even more so within a city's system), the vast variability in systems across the Nation, and the differing nature of receiving waters ranging from estuaries to dry stream beds. Further, the impacts of urban runoff are not well understood because the specific effects are masked by the greater impacts of industrial runoff, agricultural runoff, erosion, point discharges and waste overflow discharges.

A recent study completed by Montgomery Watson in February 1994 for the National League of Cities and National Realty Committee concluded that the urban stormwater runoff problem has been overstated and that results of recent water quality surveys indicate that urban runoff is a small source of stormwater pollutants compared to other non-point sources. As pointed out in the Montgomery Watson report, EPA in its 1992 Needs Assessment used nine categories to aggregate all water quality problems. One of those categories was "urban runoff." But EPA included under the "urban runoff" heading stormwater from industrial sites, wastewater overflows, discharges from shipyards and marinas, as well as runoff from commercial and residential areas. In addition, one State included impairment due to leaking septic systems and diversions of water for local water supplies as an "urban runoff" problem. Based on its analysis, the Montgomery Watson study concluded that only 4 to 10 percent of the water quality impacts resulted from urban stormwater runoff from commercial and residential areas, as opposed to the 20 to 40 percent implied in the Needs Assessment Report.

Benefits From Stormwater Quality Permit Mandate Unknown

The Montgomery Watson analysis cited previously and the experience of the municipalities implementing the stormwater quality mandate, have concluded that extensive research is needed to (1) identify the extent to which urban runoff is a true threat to receiving water uses; and (2) determine the cost effectiveness of the mandated control strategies. To date, there has been little to no analysis of the benefit that will result from the management practices now required by the municipal urban runoff NPDES program, yet some 600 local governments are currently embarking on a multibillion dollar federally mandated effort that is essentially a locally funded demonstration program. For example, street sweeping is a commonly required management practice, yet it is not known how much good the street sweeping will accomplish in terms of improved receiving water quality.

RECOMMENDATIONS AND COMMENTS: STORMWATER REFORM

The intensified scrutiny of the stommwater quality permit program brought about by those local governments working to implement this costly mandate, has identified serious problems in the statutory and regulatory framework. The National Association of Flood and Stormwater Management Agencies (NAFSMA) has identified the following areas of concern:

- Point vs. Non-Point Sources
- Water Quality Standards and Maximum Extent Practicable Standard
- Phase II Municipalities
- EPA/State Research and Technical Assistance Capabilities
- Industrial Facilities

NAFSMA's recommendations regarding each of these areas of concern follow. These recommendations are taken in the context that the mandate continues. The preferred position would be for the municipal stormwater program not to be a mandate. If the mandate continues, NAFSMA urges that States be provided with the opportunity to establish a State-developed and State-administered stormwater management program in accordance with Federal guidance. This guidance would need to be developed and reviewed with the participation of State and local representatives.

A good number of NAFSMA's members feel that the States can create a program that provides the flexibility to address local and regional variability, as well as the uniqueness of stormwater runoff.

Point vs. Non-Point

If the municipal stormwater program is going to remain a mandated program, the Clean Water Act should be amended to properly define municipal stormwater into a specific stommwater program that is neither point source or non-point source.

Rainwater falling on cities and flowing through the local storm drainage system and eventually into streams, rivers, and lakes is a nonpoint pollution problem that differs fundamentally from point sources of discharge such as public sewage treatment plant effluent. By a series of administrative actions, court decisions, and legislative acts municipal stormwater has ended up in Section 402 of the Clean Water Act which was intended to control point sources of pollution. Thus, inappropriate and unworkable linkages to Clean Water Act requirements developed for point sources have carried over to municipal stormwater. While not eliminating this mandate, moving the municipal stormwater to the nonpoint program would at least put it in the right context in terms of addressing this "problem."

Water Quality Standards (WQS) and Maximum Extent Practicable (MEP) Standard

If the municipal stormwater program is going to remain a mandated program subject to water quality standard compliance under Section 402. amend the Clean Water Act directing the development of technologically achievable and financially responsible non-numeric criteria for municipal stormwater that accounts for the uniqueness of stormwater runoff and variability between regions.

For the same reasons that rainwater falling on cities and flowing through a dispersed system of storm drains is not a point source of pollution, it is not logical to apply the same water quality standards to municipal stormwater as are applied to point sources. The existing Clean Water Act requires the reduction of pollutants in municipal stormwater to the maximum extent practicable, however the Clean Water Act as interpreted in a 1991 opinion by EPA General counsel also requires that all permits for municipal stormwater discharges include any requirements necessary to achieve compliance with water quality standards. Clarification of the application of water quality standards and associated end-of-pipe numerical effluent limits would be achieved if municipal stormwater was addressed in the same manner as other nonpoint sources. Non-numeric criteria should be developed to evaluate the effectiveness of municipal stommwater programs that are technologically achievable and financially responsible.

Phase II Municipalities

If the municipal stormwater program is going to remain a mandated program. defer permitting of municipalities outside urbanized areas where permits are now required until the currently mandated municipal stormwater programs are evaluated and determined to be cost effective and result in improvements to water quality.

The municipal stormwater program is in effect a large demonstration project that is being funded by some 600 municipalities and counties. It is crucial that more experience and knowledge be gained before the program is expanded beyond the urban areas where permits are now required.

Although we recognize many practices may have benefits in stormwater quality, it is inappropriate to impose mandates until the decisions as to "who" and "what" benefits are addressed.

EPA/State Research and Technical Assistance Capabilities

Establish the capability at the State and/or Federal level to fund support activities including new studies pilot grants to communities. direct technical assistance to communities. and development of non-numeric municipal stormwater criteria.

If the Federal Government is going to mandate such far reaching programs as municipal NPDES stormwater permitting, they need the technical and research capabilities necessary to support the effort. It is unreasonable to force local governments to implement a program whose effectiveness in unknown without, at the minimum, adequate technical support.

Industrial Facilities

If the municipal stormwater program is going to remain a mandated program, amend the Clean Water Act to allow local governments at their discretion to include their industrial facilities in their system-wide permits, and to allow, but not require, the transfer of the regulatory responsibilities to municipal permittees for industrial facilities discharging directly into the municipal stormwater system.

Under current law, local governments are required to submit individual stormwater permit applications for industrial facilities they own in addition to their system wide permit. It would be more efficient to reduce the number of permits required to include those municipal facilities requiring permit in the system wide permit.

There is interest by some municipalities and regulators in having local agencies regulate industrial discharges that discharge directly into the municipal system. Under current law all industrial dischargers are regulated by EPA or the State. Flexibility should be provided to allow, but not under any circumstances require, Federal and State agencies to transfer regulatory responsibilities to municipal permittees for industrial facilities discharging directly into the municipal stommwater system.

OTHER CLEAN WATER ACT ISSUES OF CONCERN

In the implementation of the stormwater permit program mandate imposed by the 1987 Clean Water Act amendments, and during discussion of potential 1994 Clean Water Act amendments, NAFSMA identified a number of additional concerns. In the case of each of the items listed below, adverse and often-times conflicting obligations are imposed on the effort to implement stormwater quality objectives. NAFSMA's recommendations addressing these concerns are presented with each issue.

Wetlands

(1) *Stormwater Sedimentation Basins.* Section 404 has recently been reinterpreted to prohibit removal of sediment without a 404 permit. Detention/sedimentation basins which are covered by this prohibition, serve as structural stormwater quality controls by capturing sediment borne pollutants. It is essential to the stormwater quality program that these sediments be periodically removed to prevent their concentration and possible resuspension during storm events.

Revise Section 404 of the Act such that maintenance of stormwater quality sedimentation basins is not precluded.

(2) *Maintenance of Flood Control Facilities.* It is extremely important that local flood control agencies have the authority to maintain their facilities in the interest of the health and welfare of their citizenry. In light of confusion in the field since the Corps of Engineers August 25, 1993 rule expanding the definition of "dredge and fill material," legislative changes are needed to clarify Section 404 permitting exemptions provided under the law. This new requirement can be interpreted to mean that flood control and other local agencies must now obtain a Section 404 permit from the Army Corps of Engineers for even the most routine maintenance and operation activities. It is NAFSMA's belief that this rulemaking does not properly reflect congressional intent behind the Section 404 legislative language and the association is urging that Congress help the public agencies charged with the protection of lives and property by more clearly stating their specific intent concerning the ability to operate and maintain flood control channels and engineered flood control facilities.

NAFSMA urges that legislation be adopted in the Clean Water Act renewal, to more clearly exempt operations and maintenance of flood control channels and engineered flood control facilities from the Section 404 permitting process.

Whole Effluent Toxicity Testing in Arid Areas

Many of NAFSMA's members located in the arid west have serious concerns regarding the applicability of using Whole Effluent Toxicity Testing in an environment where most of the watercourses are ephemeral. The use of a costly and inconclusive test designed to protect aquatic life is questionable in areas where aquatic life does not occur naturally. NAFSMA feels that requiring permittees in the arid west to include whole effluent toxicity testing requirements in NPDES stormwater permits is both impractical and inappropriate.

NAFSMA urges that the Clean Water Act be amended so that the EPA is more clearly directed to utilize economically feasible and regionally appropriate municipal stormwater quality monitoring.

Anti-Degradation/Anti-Backsliding

The provisions of the Act generally preclude the "downgrading" of a receiving water or an adopted standard. However, many use and standards designations are made on the basis of incomplete data. As more complete data is obtained, erroneous designations need to be revised.

The anti-degradation and anti-backsliding requirements of the Act should be amended to allow downward revisions in previously adopted uses and standards when subsequent scientific data demonstrates such a revised standard is appropriately protective.

Citizen Suits

The Clean Water Act empowered citizen groups to sue to assist in the enforcement of the Clean Water objectives. However, the technical difficulty of documenting compliance or failure to comply with complex chemical criteria invalidates "amateur" enforcement. Also, abuses of the authority in the form of "bounty hunter" suits has led to unnecessary and inappropriate litigation against communities pursuing significant compliance programs.

The citizen suit authorities of the Act should be amended to protect communities implementing good faith compliance efforts from inappropriate legal actions.

SUMMARY

Mr. Chairman, NAFSMA is encouraged by the statements in recent months indicating the recognition of the unique nature of stormwater and the need to provide relief to municipalities from the unachievable mandate that has been imposed on stormwater programs. Our members have been committed throughout this process to working with committee staff to draft approaches that are both technologically achievable and financially feasible. From the various proposals that have recently been offered for consideration on the Hill, it is clear that much progress has been made.

What is still lacking, however, is the commitment to develop specific *non-numeric* stormwater criteria that recognizes the intermittent nature of stormwater runoff, as well as the varying pollutant loadings of stormwater events and the ability of natural ecosystems to accept these temporary discharges. We are committed to working with you and the U.S. Environmental Protection Agency to develop this criteria.

Our members have already committed great resources to addressing the nation's stormwater needs and will be committing more in the years to come. What we are asking from you and your colleagues is the opportunity to sit down at the table with EPA to develop realistic program objectives and reasonable criteria for measuring our progress.

The importance of this effort cannot be stressed enough. Some of our members have already faced the possibility of the inclusion of unrealistic numeric requirements included in their individual permits. Further, some of the most aggressive stormwater quality programs in the country are being sued for failure to comply with impossible objectives. Before millions of dollars more are poured into the pursuit of this unachievable mandate, NAFSMA urges Congress to require a joint effort involving the Federal government and the regulated community to develop realistic goals and standards for this program. This approach has been successful in other programs, such as the development of the CSO guidance, and it can be so as well for the stormwater issue. If for no reason other than the $130 million dollars expended for stormwater NPDES permits, this program merits congressional attention and we would be pleased to commit our organization to working with you and U.S. EPA in this effort.

Although EPA has convened an Advisory Committee on Urban Wet Weather Issues, which will review Phase I issues, EPA has been clear in saying that this group will not consider alternatives to fix the program that look beyond the current legislative framework. NAFSMA is participating in both the Urban Wet Weather Advisory Committee and the Stormwater Phase II Subcommittee, but the association still feels that it is necessary to consider legislative amendments for the Phase I program, as described in our testimony.

Provided with this testimony is a survey on the Phase I NPDES Stormwater program undertaken by NAFSMA this fall in preparation for a national stormwater workshop NAFSMA held in conjunction with the Association's 1995 Annual Meeting held in early November. The data provided in this survey, especially on current implementation costs for municipalities confirms local governments' concerns about program costs. At least 4 out of the 77 respondents are experiencing annual implementation costs in the range of $15 to $25 million. Average annual implementation costs from the 77 respondents were $2.09 million. The respondents ranged in size from 76,000 to 3,500,000.

The survey also provides critical information on the components that respondents feel are necessary to implementing a successful stormwater management program and concerns that are the most important to the agencies in implementing their stormwater management programs. Identified as the five top concerns (in order of priority) from agency responses were program costs, monitoring, public education, watershed management issues and compliance with water quality standards.

NAFSMA SURVEY QUESTIONNAIRE ON MUNICIPAL SEPARATE STORMWATER SYSTEM PERMITS

NOVEMBER 15, 1995

Washington, DC

GENERAL RESPONSE STATISTICS

- 77 agencies responded to the survey
- Average service population: 533,223
- 42 agencies said they have an approved NPDES stormwater permit.
- 27 agencies said they have a permit application pending.
- Of those with permits or with applications pending, 27 identified themselves as single permittees, 38 as co-permittees.

1) **Rate each of the following stormwater-related questions, concerns and issues from 1 to 10 with regard to their importance to your agency (1 being most important), taking into consideration manpower and fiscal impacts:** *(Numbers indicate average responses.)*

3.0 Program Costs: Stormwater management efforts are costly. How can costs be reduced or controlled? What types of traps exist that can result in high program costs? How have municipalities funded their programs?

3.4 Monitoring: Monitoring can be costly. Results may be subject to the high variability of stormwater and may not yield the most useful results in support of a municipality's stormwater management program. How can the right monitoring efforts be selected and implemented through NPDES permits? What, if any, monitoring should be done and who should pay for it? Would a nationwide research program on monitoring be appropriate and timely?

3.6 Public Education: How useful are public education programs for controlling stormwater contamination? What works, what hasn't? How can the benefits be quantified?

3.6 Watershed Management: Should stormwater runoff be managed on a watershed basis? If yes, what is the best approach to accomplish this?

3.6 Compliance with Water Quality Standards: Should compliance with water quality standards be addressed in NPDES stormwater permits? Are water quality standards achievable for stormwater?

3.7 Structural BMP Effectiveness: How can municipalities, if planning to implement structural stormwater controls, be assured that they are investing in controls that will work for their particular circumstances? Once installed, how should the actual performance capability be assessed? Is adequate information on maintenance requirements and cost-effectiveness of such controls available to municipalities?

3.7 Stormwater Quality Management Performance Standards: "Performance Standards" have been discussed as an alternative to Water Quality Standards as a means of measuring the effectiveness of stormwater quality management programs. Can appropriate performance standards be developed? What would constitute appropriate performance standards?

3.9 Non-Structural BMP Effectiveness: Many stormwater management, programs are including BMPs that are programmatic; i.e., a pesticide usage education program. How can municipalities determine if these programmatic controls are helping to reduce stormwater contamination which result in environmental benefits?

4.0 NPDES Permits: What aspects of existing municipal or industrial permitting are burdens or create barriers to effective stormwater management?

4.5 Definition of MEP: How should "maximum extent practicable" be defined and implemented in municipal NPDES stormwater permits?

4.9 Permit re-application for municipalities: As the first round of NPDES MS4 stormwater permits expire (after 5 years), each regulated MS4 will need to reapply for a new stormwater discharge permit. What is the best way to make this process efficient, effective and with a low cost or burden? What items from the first round application (Part I and II) should not be repeated?

5.3 Industrial Compliance: Is industry fully complying with the NPDES stormwater general permits? If not, what can be done to improve the compliance level?

5.3 Annual Reports on Program Effectiveness: All regulated municipalities must submit an annual report. Do these reports provide useful information? Do they require too much or too little detail?

5.5 Redundancy of Industrial Controls: NPDES-regulated municipalities are required to include the control of separately permitted industrial runoff in their stormwater management program. Is this redundancy burdensome, or is this being successfully implemented?

5.5 Redundancy of Construction Controls: NPDES-regulated municipalities are required to include the control of separately permitted construction site runoff in their stormwater management program. Is this redundancy burdensome, or is this being successfully implemented?

6.7 Atmospheric Deposition: Pollutants can be deposited by rainfall. Is atmospheric deposition a significant source of pollution in your geographic area? If so, do permits need to account for this?

2) List five characteristics of a successful stormwater program:

Most Common Responses:	Number of Responses:
Assured Financing & Political Support	41
Public Education	39
Accurate Assessment of Pollutant Types & Sources	17
Public Support & Participation	17

Structural & Non-structural BMPs	16
Interagency Cooperation	15
Watershed-Based Approach	15
Effective Enforcement	15
Planned Maintenance & Inspection	15
Protection & Control of Sources	11
Identification of Illicit Uses	10
Integration with Other Programs	6
Cost-Benefit Analysis	6
Training Program for Industries	5

3) **List five things that currently obstruct your ability to carry out a successful program:**

Most Common Responses	Number of Responses:
Lack of funding	48
Insufficient public understanding	28
Lack of scientific data	23
Agency overlap & jurisdictional conflict	23
Lack of regional consistency	11
Inconsistency between State & Federal regulations	12
Misunderstanding of pollution causes	10
Current Clean Water Act	5

4) **Does your stormwater meet current state water quality standards?**

19 answered YES 44 answered NO

If Not, What would need to be done to meet those standards?

Most Common Responses:	Number of Responses:
Insufficient data to determine	10
Need money and time to correct problems	5
State water quality standards do not exist	5
Treatment not feasible	4
Need to identify sources	3

5) **If there was no mandate, would your municipality implement a stormwater management program?**

56 answered YES 16 answered NO

If so, what would be the key components of the program?

Most Common Responses:	Number of Responses:
Drainage Management	21
Structural operations & maintenance	18
Public Education	18
Construction site erosion plans / controls	14
Illicit discharge controls	11
Structural & non-structural BMPs	10
Sediment control	7
Habitat preservation	5

6) What is your annual cost to implement the stormwater mandate?

Cost Range:	Number of Responses:
Less than $250,000	15
$251,000 – 500,000	10
$501,000 – 1,000,000	5
$1,001,000 – 2,500,000	19
$2,501,000 – 5,000,000	8
$5,001,000 – 10,000,000	5
$10,001,000 – 20,000,000	2
Over $20,000,000	2

Maximum Annual Cost = $25,000,000

How are you paying for it?

Most Common Responses:	Number of Responses:
General Funds	40
Stormwater Utility	21
Property Tax	5

7) What changes need to be made in EPA stormwater regulations?

Most Common Responses:	Number of Responses:
Watershed approach to requirements – local conditions	15
Allowances & funding for research into BMP effectiveness	11
Modify approach to water quality standards	10
Make monitoring optional	5
Delegate program to states	5
Focus on known problems	3

Other recommendations offered:

Design modifications of automobile brake shoes
Increased flexibility at local level
Eliminate jurisdictional conflicts
Downplay chemical water quality standards
Reduce/eliminate SSO enforcement

Workshop Survey Respondents

Anchorage Public Works
Anchorage, AK

Jefferson County Alabama
Birmingham, AL

Little Rock Public Works Dept.
Little Rock, AR

City of Mesa
Mesa, AZ

Flood Control District of Maricopa Co.
Phoenix, AZ

Pima County Dept. of Trans. and Flood Control
Tucson, AZ

Los Angeles Co. Dept. of Public Works
Alhambra, CA

City of Fremont
Fremont, CA

Fresno Metro Flood Control Districe
Fresno, CA

City of Glendale
Glendale, CA

Alameda Co. Public Works
Hayward, CA

Alameda Co. Clean Water Program
Hayward, CA

Alameda Co. Flood Control
Hayward, CA

City of Irvine
Irvine, CA

Contra Costa Clean Water Program
Martinez, CA

City of Oakland
Oakland, CA

Riverside Co. Flood Control
Riverside, CA

Co. of Sacramento
Sacramento, CA

City of Sacramento Utilities
Sacremento, CA

San Bernadino CO. Flood Control
San Bernadino, CA

City of San Diego
San Diego, CA

Orange Co. EMA
Santa Ana, CA

City of Stockton
Stockton, CA

City of Sunnyvale
Sunnyvale, CA

Vallejo Sanitation and Flood Control
Vallejo, CA

City of Aurora Utilities Dept.
Aurora, CO

Urban Drainage and Flood Control District
Denver, CO

City of Fort Collins Stormwater
Fort Collins, CO

DC Department of Public Works
Washington, DC

City of Jacksonville Public Works
Jacksonville, FL

City of Jacksonville Public Works
Jacksonville, FL

Sarasota Co. Government
Sarasota, FL

City of Tampa, Stormwater Mgt. Division
Tampa, FL

City of Savannah
Savannah, GA

Department of Public Works, Honolulu
Honolulu, HI

Metro Water Reclamation Dist.
Chicago, IL

City of Wichita
Wichita, KS

Louisville and Jefferson Co. MSD
Louisville, KY

Jefferson Parish Env. Control Dept.
Harahan, LA

City of Shreveport
Shreveport, LA

Boston Water and Sewer Commission
Boston, MA

Dept. Public Works, Water Quality Mgmt.
Baltimore, MD

Montogomery Co. Water Resources Planning
Rockville, MD

City of Rochester, Public Works
Rochester, MN

St. Paul Public Works
St. Paul, MN

Montana DEQ
Helena, MT

City of Greensboro
Greensboro, NC

Raleigh Engineering Dept.
Raleigh, NC

City of Raleigh Engineering Dept.
Raleigh, NC

City of Winston-Salem
Winston-Salem, NC

Public Works
Lincoln, NE

Newark Dept. of Engineering
Newark, NJ

N.J. Dept. of Environmental Protection
Trenton, NJ

City of Albuquerque Public Works
Albuquerque, NM

Clark Co. Regional Flood Control
Las Vegas, NV

City of Reno
Reno, NV

City of Rochester Public Works
Rochester, NY

City of Columbus, Div. of Sewerage & Drainage
Columbus, OH

City of Toledo Public Utilities
Toledo, OH

Public Works Dept., The City of Oklahoma City
Oklahoma City, OK

Tulsa Public Works
Tulsa, OK

Unified Sewerage Agency
Hillsboro, OR

City of Portland Environmental Services
Portland, OR

City of Philadelphia, Water Dept.
Philadelphia, PA

City of Knoxville
Knoxville, TN

Metro Nashville Public Works
Nashville, TN

City of Arlington
Arlington, TX

City of Dallas
Dallas, TX

City of El Paso
El Paso, TX

San Antonio Water System
San Antonio, TX

Salt Lake County Engineering Division
Salt Lake City, UT

City of Alexandria
Alexandria, VA

Arlington Co. Public Works
Arlington, VA

City of Norfolk
Norfolk, VA

City of Richmond Dept. of Public Utilities
Richmond, VA

King Co. Surface Water Management
Seattle, WA

Tacoma Public Works
Tacoma, WA

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December 12, 1995

BY FACSIMILE
Senator John H. Chafee
Chairman
Senate Environment and Public Works Committee
SD-567 Dirksen Senate Office Building
Washington, D.C. 20510-3902

Dear Chairman Chafee:

We recently learned that tomorrow the Senate Environment and Public Works Committee ("Committee") will hold a one-day hearing on the reauthorization of the Clean Water Act. We understand that the principal focus of the hearing will be on municipal issues and that testimony from the hearing will be used to help shape your reauthorization legislation, which is likely to be introduced shortly.

We are surprised that a representative of ***The CSO Partnership*** was not invited to testify regarding the issue of combined sewer overflows. As you are aware, the control and abatement of CSOs is one of the most significant issues facing municipalities today. This is particularly true for the small to medium-sized communities that make up the vast majority of the 1100 CSO communities nationwide. ***The CSO Partnership*** comprises many of these 1100 communities. For most of these smaller communities, their CSO problems pose the single biggest challenge they face.

As you know, the issue of CSO control is one of the central provisions in H.R. 961. While you have previously indicated that your reauthorization bill will also address CSO controls, CSO control issues are conspicuously absent from your November 15 letter to Senator Faircloth setting out the issues that you intend to address. We are concerned that the issue of CSO control not be overlooked. Our concern is exacerbated by the fact that none of the individuals scheduled to testify before the Committee tomorrow represents the interests of the hundreds of small to medium-sized CSO communities.

Representatives from ***The CSO Partnership*** have testified on CSO issues during prior sessions and we would welcome the opportunity to testify before the Committee next year when additional hearings are scheduled.

Given the fact that you are now in the process of drafting a reauthorization bill, we would like to reiterate our views on what the bill should contain relating to the control and abatement of CSOs. We believe the following five points are critical to our members and to CSO communities nationwide:

1. EPA's April 1994 National Combined Sewer Overflow Policy should be incorporated into the CWA and permits issued to control CSO discharges must conform to the Policy.

2. Language should be added to prevent NPDES permitting authorities from requiring that CSO discharges meet water quality standards for at least 15 years. Extensions beyond 15 years shall be granted for communities that demonstrate they are financially incapable of meeting water quality within the 15 year period.

3. Language should be added stating that previously issued administrative and judicial decrees or orders shall, at the affected community's request, be modified to conform to the extended deadlines, schedules or timetables provided in item 2 above.

4. Language should be added requiring NPDES permitting authorities to complete the water quality standards review and revision process identified in the Policy and adopt any modifications necessary to reflect the site-specific wet weather impacts of CSOs before the development and implementation of long-term CSO control plans.

5. Funding for the SRF and grants for wastewater projects should be at least $3 billion. Also, the SRF cap of 20 percent for CSO control projects should be eliminated. Finally, the SRF loan term should be extended to 40 years with the possibility that negative interest loans could be made to communities with financial hardships.

Thank you for considering our views on these vitally important CSO control issues. I will contact your staff soon to discuss providing testimony during the next round of CWA hearings.

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In the meantime, we will be happy to provide any further information that you may require regarding our legislative requests.

Sincerely,

Mark W. Poland

cc: Hon. John Warner
Hon. Robert Smith
Hon. Mitch McConnell
Hon. Frank Lautenberg
Hon. Barbara Boxer
Jimmy Powell
CSO Partnership Board of Directors and Members
David E. Evans

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